

Running head: CAPTIONING AT THE UNIVERSITY OF MINNESOTA DULUTH

Video Captioning Policy and Compliance at the University of Minnesota Duluth

THESIS

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By

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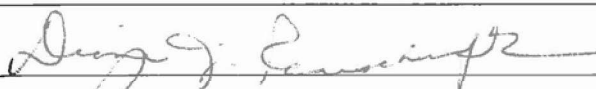
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Thank you to my family and friends who supported me. Thank you to the members of Cohort 21 who made my M.Ed. program experience unique and fulfilling. Thank you to all of my fine instructors who shared their passion and interests.

Dedication

To Henry and Tristan, who are always turning Netflix closed captioning on. Let's finish the research and go play.

Abstract

This is a study on video captioning policy and compliance at the University of Minnesota Duluth. It examines attitudes towards, understanding of, and support for video captioning in a college setting. Through the use of a survey and interviews, the thoughts of both staff and faculty were collected and examined. Video captioning is considered both as a support for deaf and hard of hearing individuals as well as a means by which to enhance learning for those for whom English is not a first language. Ideas for future action are presented.

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CHAPTER ONE

INTRODUCTION

Goal 2 of the University of Minnesota Duluth's Strategic Plan is to, "Create a positive and inclusive campus climate for all by advancing equity, diversity, and social justice" ("Goal 2 advancing"). As part of this vision, the University of Minnesota Duluth has adopted a strong policy regarding the captioning of video used on campus. While having such a policy in place is a good first step towards ensuring accessibility of materials, a policy is only worth something if its words become action.

Purpose of the Study

The purpose of this study is to assess video captioning policy awareness and compliance among University of Minnesota Duluth (UMD) faculty and staff. Through the use of surveys and interviews, the researcher hopes to paint a robust picture of current attitudes towards UMD's video captioning policy, as well as identify the various methods used by individuals and departments to caption videos. In addition, this study will address the technical skills needed to caption videos, examine issues related to funding, copyright, and time commitments, as well as identify other potential barriers preventing access to or creation of captioned video on campus. This study is the first phase in a larger project intended to improve video captioning policy compliance at the University of Minnesota Duluth.

Setting

Data for this study were gathered primarily through an anonymous, online survey sent via email to all faculty and staff employed by the University of Minnesota Duluth. All questions in the survey were optional. Survey participants were invited to contact the Principal Investigator if they wished to participate in an in-depth, in person interview.

Background

In September 2012, the University of Minnesota Duluth adopted an official Policy on Captioning of Video. In addition to strengthening UMD's compliance with federal laws, the stated purpose of the policy is to provide "equal access to learning resources" as well as to "promote universal design principles" ("Policy on captioning," 2012). UMD's policy on captioning of video is in addition to and in accordance with the University of Minnesota's Administrative Policy on the Accessibility of Information Technology ("Accessibility of Information," 2002). The captioning policy is also tied to Goal 2 of UMD's Strategic Plan, which details action steps to "create a positive and inclusive campus climate for all by advancing equity, diversity, and social justice" ("UMD strategic planning," 2011).

UMD's Accessible Technology Team has identified a service that can provide captioning for prerecorded videos at the rate of \$162 per content hour. Funding to cover the cost of the captioning services is only provided by the University of Minnesota system budget under certain circumstances, specifically when a student in a course is officially documented by UMD's Office of Disability Resources as needing

captioning as an accommodation (“Captioning service,” 2014). The Policy on Captioning of Video’s reach is much broader however; it requires captioning whenever a video is being shared in an unrestricted way (e.g. a video posted to the open web). Additionally, effective January 1, 2014, the W3C Web Content Accessibility Guidelines 2.0 level AA (which serve as the web accessibility standard for the University of Minnesota system) began requiring captioning of all live and prerecorded audio-video content on the web (“Policy on captioning,” 2012). Therefore, all video content posted to the web as part of official University communications is required by policy to be captioned.

While UMD’s Office of Disability Resources, the UMD Library, and UMD’s department of Information Technology Systems & Services (ITSS) have partnered to help provide video captioning resources to the UMD community, as of May, 2014, official online documentation related to video captioning on campus does not set clear expectations for funding sources outside of classroom settings in which an individual student has a documented need for captions. Additionally, very little documentation has been made available on live video captioning options or on procedures related to video captioning that don’t involve the hiring of an external service. In short, while there is a policy mandating that most videos shown at or by UMD are captioned, the means by which to achieve this goal are less than clear.

Assumptions

I received my Bachelor’s degree from the University of Minnesota Duluth in 2003 and am scheduled to receive my Master’s of Education degree from UMD in

2014. I was employed by UMD's Department of Information Technology Systems & Services (ITSS) as an undergraduate student and have worked for the department professionally since 2006. My primary work related duties include general end-user support and training for students, staff, and faculty, and I also develop websites for the campus. Over the years, I have intermittently served on UMD's Accessible Technology Team as well as on the campus-wide Commission on Disabilities. Prior to my current job, I was the lead technology guru for a non-profit that provides supports for people with disabilities.

I have over a decade of experience working with technology specifically at UMD and have a special interest in accessible technologies. While I believe that UMD's Policy on Captioning of Video is both well intentioned and sorely needed, personal experience has made me concerned that the campus generally lacks the resources and knowledge needed to comply with policy. My hope is that by gathering data through formal research, I can help identify ways in which the campus can refine and strengthen the support and resources it provides for video captioning.

Scope of the Study

This study is limited to the voluntary responses offered by faculty and staff members employed by the University of Minnesota Duluth. The survey examines self-reported knowledge, skills and attitudes towards captioning of video. Because the survey was anonymous and conducted through a link sent out via email, it is possible that individuals outside of the target group may have participated without the knowledge of the Principal Investigator. It is likely that those who did take the time to

respond to the survey are generally more interested in captioning, accessibility, videos, and/or related issues than those who did not choose to respond. Student responses were not included in the survey, nor were students interviewed. Students would undoubtedly add an important perspective to future research on the topic of captioning of video at UMD.

Definitions from the National Association of the Deaf

- captioning - The process of converting the audio content of a video into displayed text. Captions not only display words as the textual equivalent of spoken dialogue or narration, but they also include speaker identification, sound effects, and music description.
- closed captions - Captions are visible only when selected and activated.
- open captions - Captions that are permanently embedded in the audiovisual material and cannot be deactivated or turned off.

Summary

This study examines video captioning policy awareness and compliance amongst University of Minnesota Duluth faculty and staff. It attempts to identify the strengths and weaknesses of current resources and support related to the captioning of video on the campus. This research is the first step in a project that seeks to improve video captioning policy compliance at UMD.

CHAPTER TWO

LITERATURE REVIEW

This study examines video captioning policy awareness and compliance amongst University of Minnesota Duluth (UMD) faculty and staff. To understand the importance of captioning and the work that goes into it, one must be familiar with the history of captioning, the legal issues surrounding captioning, and the basic technical options available for captioning a video. Perhaps most importantly, one must understand the benefits associated with captioning. This chapter provides a basic overview of the major issues surrounding captioning of video.

A brief history of video captioning and related legal issues

Prior to the invention of radio and television, newspapers served as the primary means to distribute news, and books and magazines were major sources of information and entertainment. As a visual medium, print was as accessible to the deaf community as it was to the hearing population. However, around 1920, with the advent of radio broadcasts aimed at the general public, those who were deaf increasingly found themselves cut off from important real time news and entertainment sources (Greco, 2013).

At around the same time that radio began assuming cultural significance, film as a source of information and entertainment began growing in popularity. Of course, the first films were silent and used title cards to communicate dialogue and narration. While silent movies were equally accessible to both deaf and hearing people, the debut

of the first “talkie” in 1927 soon made silent films a thing of the past. By the 1930s, the deaf community found themselves at a disadvantage when it came to film accessibility (Greco, 2013). It wouldn’t be until 1998 that companies would begin adding captioning for selected first-run movies at some theaters, making films once again accessible to deaf and hard of hearing individuals (Association of Science).

Television as a commercial medium rose to prominence in the 1950s. Similar to film, television’s partial reliance on audio to convey information served as a barrier for deaf and hard-of-hearing audiences. It wasn’t until 1970 that the ABC television network partnered with the National Bureau of Standards for an experiment. According to the National Captioning Institute, “The Bureau wanted to use a portion of the network television signal to send precise time information nationwide, digitally encoding this data in a part of the television signal that didn’t carry picture information.” The experiment ultimately failed, but it managed to inspire the Bureau to try encoding captions in the signal instead (The National Captioning Institute).

In 1971, the first national conference on Television for the Hearing Impaired was held. At the conference, two different captioning technologies, both of which relied upon specialized equipment, were demonstrated. On February 15, 1972 in a presentation at Gallaudet College, ABC and the National Bureau of Standards debuted a system by which closed captions were embedded within a normal broadcast of an episode of the *Mod Squad*, demonstrating “the technical viability of closed captioning” (The National Captioning Institute).

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1972 also saw the debut of open captioning. Public Broadcasting Service’s (PBS) show *The French Chef*, starring Julia Child, made history by adding captions viewable to all. It was the first time Americans who were deaf or hard of hearing were given the opportunity to “enjoy the audio portion of a national television program through the use of open captions” (Association of Science). A year later in 1973, PBS began rebroadcasting an open captioned version of *The ABC News*, five hours after the original broadcast. It remained the only accessible and timely newscast available in the United States for nearly a decade (Association of Science). Indeed, it was PBS, with the approval of the Federal Communications Commission (FCC) who researched, developed, and led the way with captioning technologies throughout the 1970s (Association of Science).

The 1980s brought with them the first fully closed captioned television series and also saw the development of “real-time captioning, a process for captioning newscasts, sports events, and other live broadcasts as the events are being televised” (The National Captioning Institute). At last, the world of television really began to open up to deaf and hard of hearing communities. But it wasn’t until 1990, with the

passage of the Americans with Disabilities Act (ADA) that captioning became something that could be legally required. “Title III of the ADA requires that public facilities, such as hospitals, bars, shopping centers and museums (but not movie theaters), provide access to verbal information on televisions, films or slide shows” (The National Captioning Institute). Captioning is considered one of the means by which to comply with the law.

1990 also produced the Television Decoder Circuitry Act which “mandated that by mid-1993 all new television sets 13 inches or larger manufactured for sale in the U.S. must contain caption decoding technology” (Association of Science). The Telecommunications Act of 1996 required that "video programming first published or exhibited after the effective date of such regulations is fully accessible through the provision of closed captions." According to the Association of Science’s Accessible Best Practices Resource Center, “The FCC mandated an eight-year phase-in starting on January 1, 1998, for captioning of “new” programming (programs that air for the first time after the ruling takes effect).” The FCC also required that “by January 1, 2006, 75 percent of programming that originally aired before the Act must be captioned” (Association of Science).

Closed captioning is now nearly ubiquitous on television programming in the United States. However, as radio, film, and television all came of age in the twentieth century, the twenty-first century has seen a rapid shift in communication and entertainment distribution -- primarily dominated by a switch to Internet-based technologies. Ensuring that video and audio on the web is accessible to the deaf and hard of hearing has marked a new chapter in the struggle for access. It wasn’t until

January 12, 2012, that “the FCC adopted rules requiring captioned programs shown on TV to be captioned when re-shown on the Internet” (Federal Communications Commission). However, there are many exceptions to this rule. From the FCC website:

- The new rules cover full-length video programming. Video clips and outtakes are not required to be captioned when shown on the Internet. However, when a captioned TV program is re-shown on the Internet in segments, it must be captioned if substantial portions of the entire program are shown in those segments.
- Consumer-generated media (e.g., homemade videos) shown on the Internet are not required to be captioned, unless it has been shown on TV with captions.
- Movies shown on the Internet are not required to be captioned unless they have been shown on TV with captions.

Popular services such as Netflix, which streams movies and television shows to digital devices, have been slow to add captioning to their content. In 2011, the National Association of the Deaf (NAD) sued Netflix under the Americans with Disabilities Act (ADA) for “failing to provide closed captioning for most of its “Watch Instantly” movies and television streamed on the Internet” (National Association of the Deaf, 2011). Netflix moved to dismiss the case and was denied (Christian, 2014). In 2012, Netflix and NAD reached an historic agreement that would see all of Netflix’s content captioned by 2014 (National Association of the Deaf, 2012). While Netflix has adhered to the deal, significant complaints have arisen regarding the accuracy of the captions

Netflix has produced. NAD CEO Howard Rosenblum was quoted as saying, “As we push for 100 percent captioning, our next battle will be the quality of the captioning itself” (Christian, 2014).

Other popular streaming video sites such as Google’s YouTube have the ability for content creators to add captions, but there is no requirement to do so. YouTube also offers automatic captioning through the use of speech recognition technology (YouTube, 2014). However, the automatic captions are notoriously inaccurate, leading to the creation of an Internet meme known as “YouTube Automatic Caption FAIL” wherein users post humorous examples of YouTube captions that don’t match the actual audio content (“Youtube automatic caption,” 2014). While these deficiencies may be amusing to those who do not rely upon captions for access to materials, they are simply another barrier and source of frustration for those who do.

The Internet has produced an explosion of video and audio content for the public to consume; yet once again, accessibility for the deaf and hard of hearing has mostly been an afterthought. There are few legal requirements to caption most content appearing online, and issues must often be addressed on a case-by-case basis. Automatic captioning technology is making strides, but still lacks the accuracy needed to produce a reliable, quality experience for users. After many years of progress on ensuring that traditional video material is captioned, online video is presenting new legal and technical challenges that must be addressed.

Options for producing captions at the University of Minnesota Duluth

Historically, captioning was a process performed by professionals who had access to specialized equipment and training. Content production was often centralized, helping to simplify procedures and funding. While this system still exists and manages to function well enough for the media production workflows for which it was designed, many online or non-professional content creators cannot as easily take advantage of the traditional options for captioning.

The University of Minnesota Duluth (UMD) contracts with a vendor called 3Play Media (“Captioning service,” 2014). 3Play Media provides captioning services to the UMD community. While the captioning provided by 3Play is handled by professionals with professional options and results, it does come at a cost. As of May 2014, the price to outsource captioning to 3Play Media is \$162 per content hour or \$2.70 per minute. Turn around time is usually several business days, and can be longer during busy periods (“Captioning service,” 2014). 3Play Media can also help navigate copyright issues in certain cases; for example, publicly accessible YouTube videos may be captioned by someone other than their owner through the use of a special browser plug-in (Murphy, 2014). While professional outsourcing is a good fit for some captioning needs, the time and money required can be a barrier in many instances.

YouTube’s automatic captioning feature makes use of speech recognition technology to produce closed captions for most videos uploaded to YouTube (YouTube, 2014). While the accuracy of the captions is usually mixed at best, it can give creators a start on the captioning process, as YouTube does give video owners the ability to edit

their captions (“Edit captions,” 2014). The University of Minnesota system has a service agreement with YouTube’s owner, Google, which makes YouTube one of the preferred means for distributing videos at UMD (“Available apps,” 2014). A synchronized, automatically generated caption track and access to a web-based software platform designed to allow for the simple editing of captions can be a huge time-saver when compared to generating captions through a completely manual process.

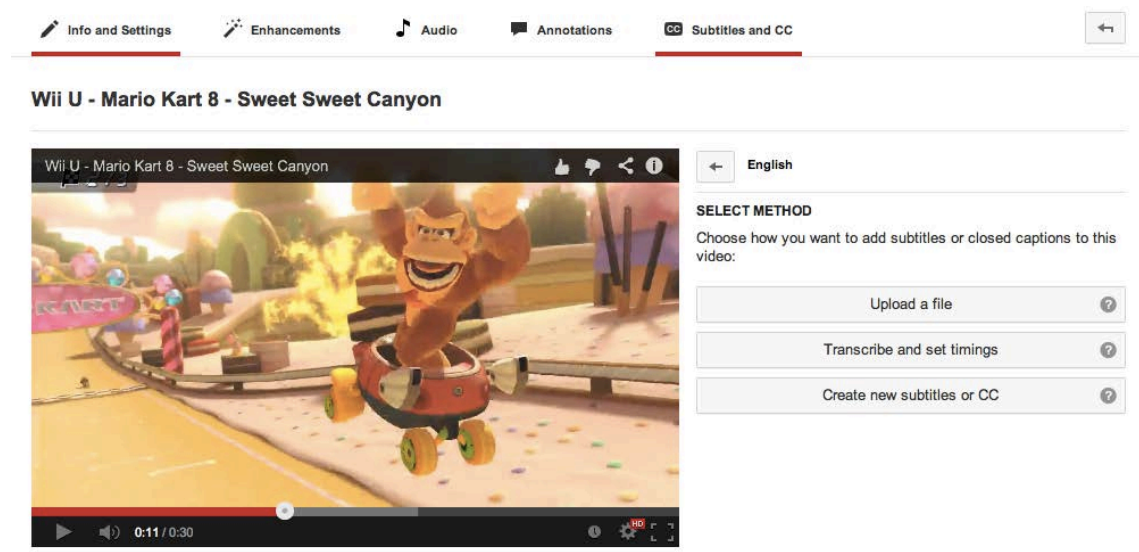


Figure 1. YouTube Captioning Screenshot.

Without any sort of transcript from which to work (automatically generated or otherwise) manually adding captions to video is the last major option. One of the challenges faced by those wishing to caption their videos is the plethora of video platforms and formats that currently exist, each one requiring a slightly different technical approach to get the job done. Not only must the caption text be produced, but it then also must be added and synchronized to the video. There are many different tools available to caption video. However, the University of Minnesota has developed a

“web-based video annotation tool for mobile and desktop devices” called VideoANT. VideoANT “supports annotation of any publicly accessible video file or YouTube video” (“VideoANT about,” 2014). The tool is free to use for those affiliated with the University of Minnesota, or by signing in through Facebook, Google, or Twitter, but it requires users to generate their own captions or annotations. While users generally describe VideoANT as an easy tool to use, a drawback is that it does display the annotations next to the video and not overlaying the video. That display method can make captioning harder to follow for users who are deaf.

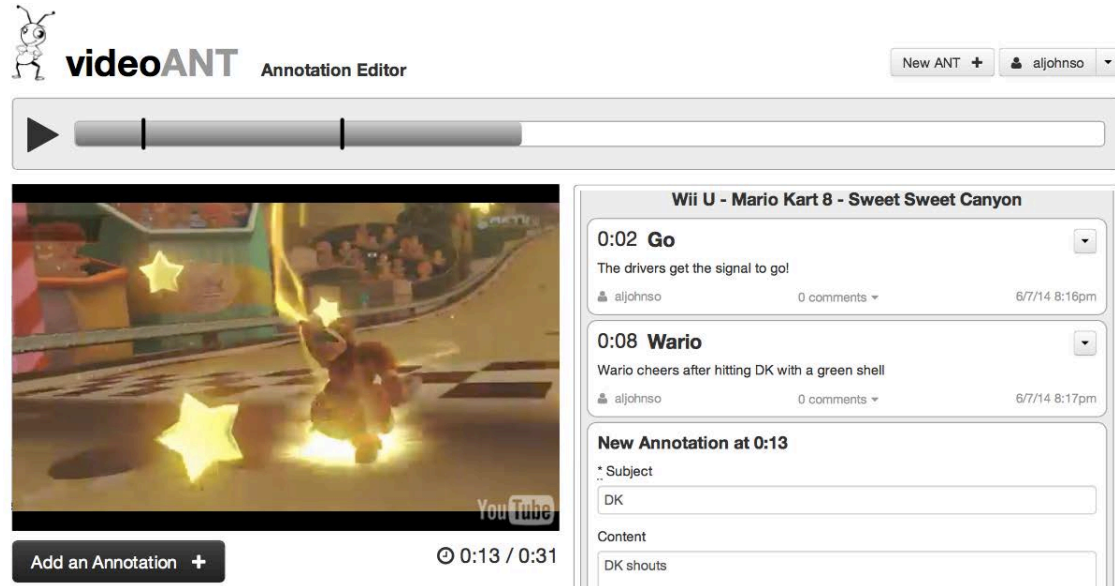


Figure 2. VideoANT interface screenshot.

Finally, there is the matter of captioning live streaming video productions. While technology is always changing and advancing, as of May 2014, live captioning at UMD is outsourced to professional services. The University of Minnesota often uses livestream.com to handle streaming of its major events (“Umn-tv”). Captioning packages start at \$850 per event, with additional fees depending on the day of the week,

the length of the event, the total number of viewers, et cetera (“Livestream subtitles”). Obviously, the cost involved with live captioning is a significant hurdle to clear, especially for those who wish to stream more casual events. Other live captioning options do of course exist, but the University of Minnesota Duluth has yet to establish ongoing, formal relationships with other live caption service providers.

Benefits of captions

With all of the challenges associated with captioning of video, some may find themselves wondering if it’s even worth it. Access for the deaf and hard of hearing is the obvious reason for captioning, both for ethical as well as legal reasons. However, the benefits of captions extend beyond ensuring access for the hearing impaired. Captions have been shown to make it easier for viewers to learn technical terms (“Captioning service,” 2014). By captioning a video, one makes it more searchable on the Internet (Murphy, 2013). And of course, video captions can come in handy for hearing viewers who are in noisy environments, or for people who are in places where they must keep the sound turned down low or off (“Captioning service,” 2014). Additionally, there are compelling academic reasons for captioning video. Captioning has been shown to improve video comprehension and engagement (“Video captions improve,” 2013). Captions can also assist those for whom English is not a first language (Media Access Canada, 1994).

A case study conducted at San Francisco State University found that “students’ test scores and comprehension improved dramatically when captions were used while

watching videos” (“Video captions improve,” 2013). Assistant Professor Robert Keith Collins who conducted the study was quoted as saying:

Not only were students talking about how much having the captions helped them as they took notes, their test scores went up. During the baseline year, there were a lot of Cs. In the second years, they went from Cs, Ds and Fs to As, Bs and Cs. It was really significant improvement. (“Video captions improve,” 2013)

Additionally, Collins reported that, “Class discussions also became livelier and more detailed, with students recalling specific information shown in the videos such as names of people and places” (“Video captions improve,” 2013).

Another case study, cited in a curriculum guide for “Using Captioning as a Teaching Tool for English as a Second Language (ESL) Learners” compared two separate ESL classes at Sheridan College in Canada. One class viewed video materials with no captioning, and the other class viewed the same materials with captioning turned on. According to the curriculum guide:

Teachers recognized faster language skills development in the students in the study classes. In all areas tested: vocabulary; grammar; memo writing; dictation; reading comprehension; and communication functions, the study group surpassed the control group. At the completion of the study, a comparison of pre-session test scores with post-session test scores showed that the overall improvement achieved by the study group was almost **double** the improvement made by the control group. (Media Access Canada, 1994)

While that particular study was conducted specifically within an ESL class, it is easy to imagine how the benefits might extend to English language learners in their general courses as well.

Summary

This study examines video captioning policy awareness and compliance by University of Minnesota Duluth (UMD) faculty and staff. The literature review established a brief legal, technical, and social history of captioning, gave a basic overview of captioning options available at UMD as of Spring 2014, and built a case for video captioning that extends beyond ensuring materials access for deaf and hard of hearing viewers. Now we shall examine our study and its findings.

CHAPTER THREE

METHODOLOGY

In order to better understand video captioning policy awareness and factors that affect compliance, an anonymous, online survey of University of Minnesota Duluth staff and faculty was conducted. The survey was followed by one-on-one interviews of individuals who were interested in discussing the subject in depth. This chapter will first describe the setting and participants studied, will next discuss the development of the survey, and will conclude with a description of the process used to gather and analyze the data.

Setting and Participants

An invitation to participate in an anonymous online survey on video captioning at UMD was emailed to all faculty and staff employed by the University of Minnesota Duluth. Participants were asked to identify their primary role on campus as either faculty or staff, with an option of “other” and the ability to include a written explanation. All survey questions were optional. Although most staff are not engaged in formal teaching roles on campus, some staff do produce videos in their work, some staff show videos as part of their jobs, and nearly all staff are asked to view videos at one time or another; thus staff input was considered valuable. Participant identities remained completely anonymous unless the individual used an email address or phone number presented in the survey to voluntarily contact the Principal Investigator with questions or comments or for a follow-up interview. Follow-up interviews were conducted at a time and in a location of the participant’s choosing.

Research Design

The survey was developed by the principal investigator, along with input from members of UMD's Accessible Technology team as well as from sign language interpreters employed by the University. Additionally, feedback from a graduate student (who identifies as deaf) was incorporated into the survey design. The proposed research was submitted to the University of Minnesota's Institutional Review Board and received approval under category #2 with exemption from a full committee review. (See Appendix A for IRB materials). The survey and follow-up interviews employed a mixed-methods approach, combining both qualitative and quantitative data. Participants were asked to respond to both questions of fact as well as to share their own thoughts, feelings, and experiences related to the captioning of video. A copy of the online survey questions and responses, and the IRB approval can be found in Appendix A and B.

Data Gathering and Analysis

Quantitative data were graphed and analyzed for trends. Qualitative data from survey comments and interview responses were grouped into related categories and analyzed for themes that could serve to assist in developing a more robust understanding of video captioning policy awareness and compliance at UMD.

Summary

The survey and interviews gathered thoughts and opinions on video captioning policy from both staff and faculty at UMD. Voluntary and anonymous in nature, it

engaged those interested enough in the topic to take the time necessary to make their voices heard.

CHAPTER FOUR

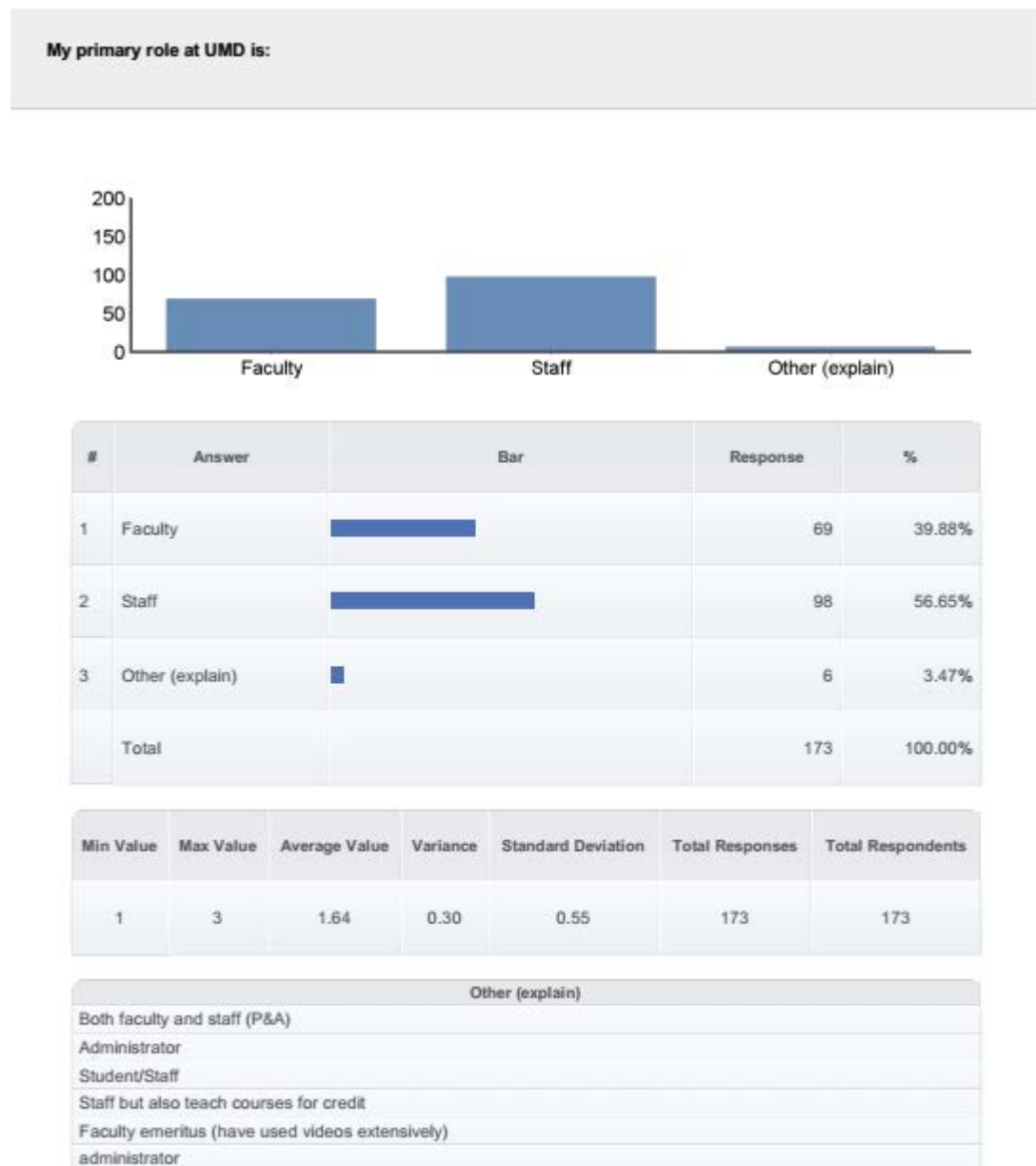
RESULTS AND DISCUSSION

This study used an anonymous online survey to help assess video captioning policy awareness and compliance amongst University of Minnesota Duluth (UMD) faculty and staff. The survey was followed by two interviews with individuals interested in exploring the topic in more depth. First we will review who responded to the survey. Next we will examine the overall understanding of and compliance with captioning policy based on the survey responses. Finally, we will attempt to deepen our understanding of the data by highlighting key themes revealed in survey comments and in subsequent interviews.

Results

An invitation to participate in the survey was emailed out to all faculty and staff at the University of Minnesota Duluth. The first email was successfully sent to 1,872 individual accounts on April 30, 2014. A reminder email, sent one week later on May 7, 2014, reached 1,859 accounts. In total, 180 responses to the survey were recorded, providing a response rate of approximately 9.6%. 173 individuals chose to identify their primary role at UMD, with 69 (39.9%) reporting to be faculty, 98 (56.7%) identifying as staff, and 6 (3.5%) selecting “other”. Those in the “other” category primarily claimed dual roles of both faculty and staff or student, or listed themselves as administrators or faculty emeritus.

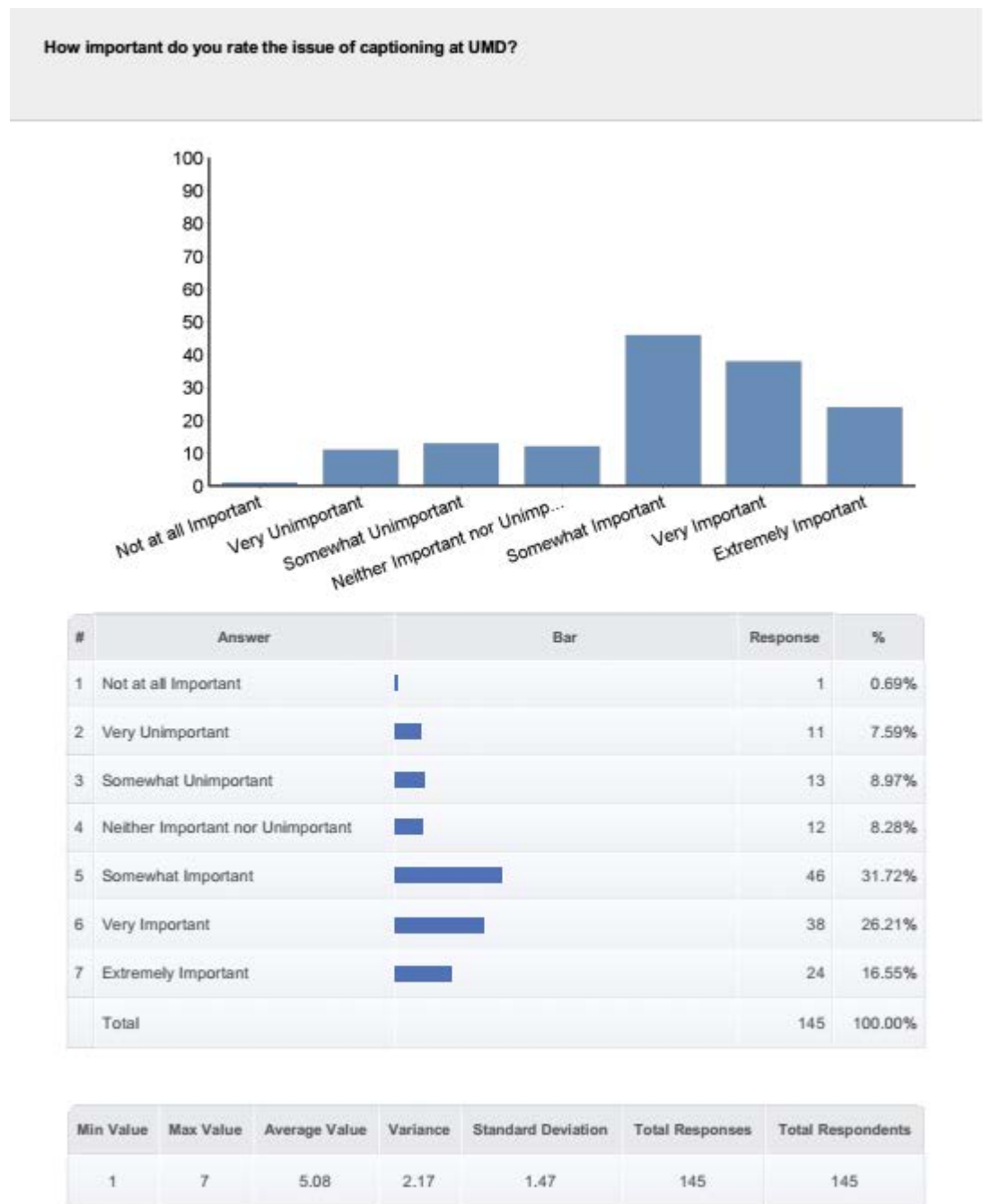
Table 1. Percentage of respondents who are faculty versus staff, as self-reported



Of the 152 respondents who answered the question, just over 86% (131) said that they had personally watched captioning on video before. Only 30% (46) of those

who responded to the question knew the difference between open and closed captioning. Approximately half said they had had a co-worker or a student in their class who identified as either deaf or hard of hearing, with the other half selecting “not to my knowledge” (75 to 74). Nearly 83% (126) had at some point had co-worker or student in their class whose first language was not English. When asked near the end of the survey to rate the importance of captioning at UMD, over 74% (108) of a total of 145 respondents rated the issue as somewhat, very, or extremely important.

Table 2. Perceived importance of captioning as rated by respondents



Out of those respondents who identified as faculty, 54 said they assign videos to be watched in class and 38 said they assign videos to be watched outside of class

hours. 7 aren't currently using videos in classes but are interested in doing so, and only 2 claimed to have no interest in using videos in classes. Those taking the survey were able to select multiple responses or skip the question entirely. Of the staff who responded to the question, the majority chose "N/A I do not instruct classes at UMD" however, 27 staff members assign videos to be watched in class or outside of class, or are interested in doing so.

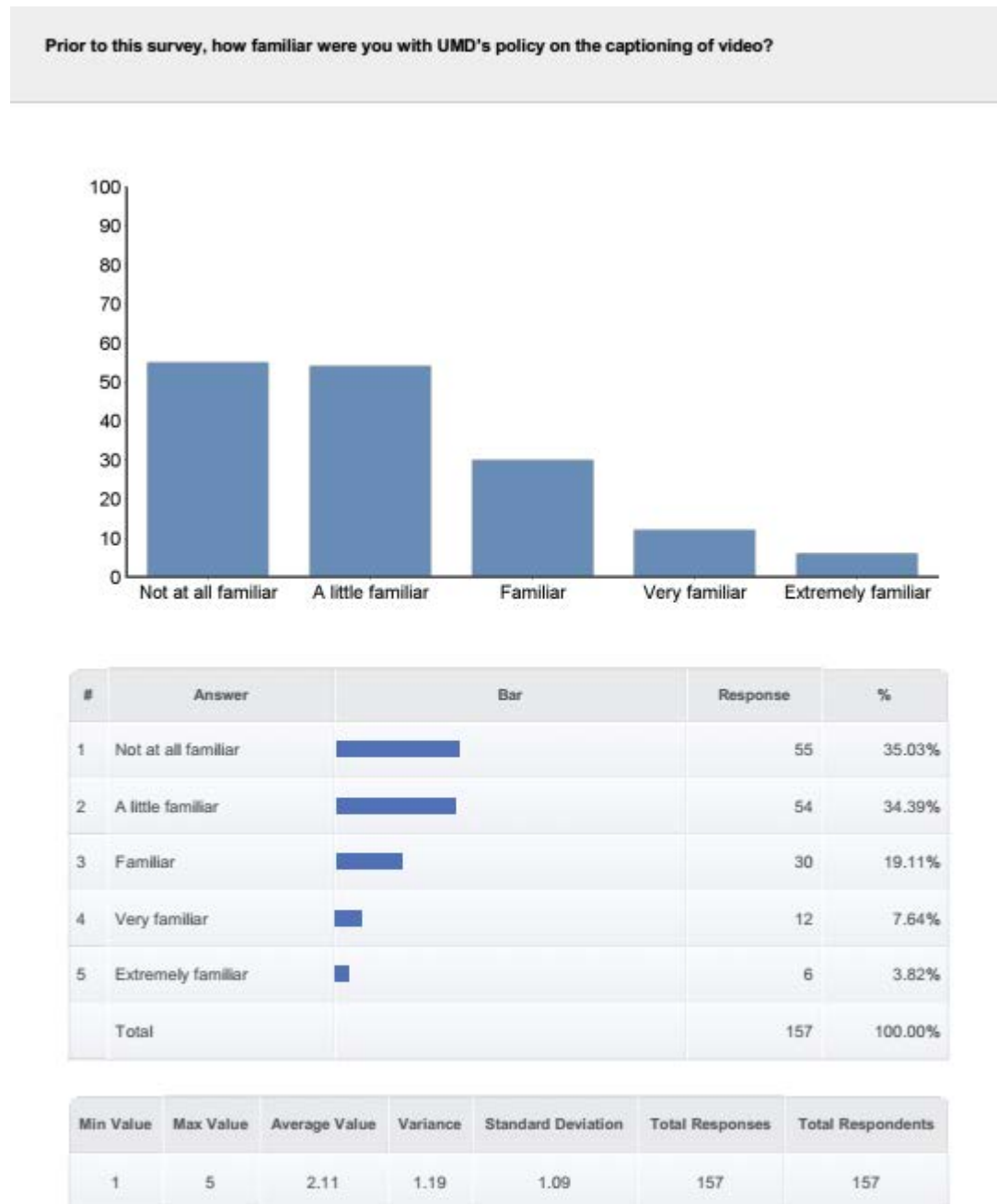
When it came to answering the question, "Do you ever include the use of videos in official public communications at UMD?" faculty responses were split in half, with 33 either sometimes using videos in official public communications or saying that they are interested in doing so. Another 33 faculty respondents said they had no interest in using videos in official public communications. Staff, on the other hand, had only 14 people say they had no interest in using videos in official public communications, while 80 responded that they do sometimes use videos or are interested in doing so.

While the majority of people responding to the survey do use videos in the course of their work at UMD, just over 70% (111) said they have never broadcasted live video to the Internet nor had they considered doing so. It seems live video streams have yet to become common at UMD.

When asked, "Prior to this survey, how familiar were you with UMD's policy on the captioning of video?" over 35% (55) of the 157 individuals who responded to the question said they were "not at all familiar". Just under 35% (54) claimed to be "a little familiar". Approximately 19% (30) of respondents marked "familiar", 7.6% (12) were

“very familiar” and the remaining 3.8% (6) said they were “extremely familiar” with the policy before being presented with it as part of the survey.

Table 3. Familiarity with UMD's captioning policy



Asked to rate their compliance with the captioning policy up until this point, nearly 11.5% (18) of respondents judged themselves to be not at all compliant, 21% (33) were compliant some of the time, 25.5% (40) were compliant most of the time, and 19% (30) were always compliant. However, nearly 23% (36) marked “N/A”. Of the “N/A” those who chose to explain generally said that they don’t create or use videos, or didn’t believe that the policy directly applied in their case.

Out of the 152 individuals who answered the question, “Have you ever decided against showing or distributing a video at UMD because it was not captioned?” nearly 35% (53) confirmed that lack of captions has kept them from using a video. Another 23% (35) have selected videos knowing that they weren’t captioning, but 42% (64) admitted to never previously taking captioning into account.

YouTube was selected as the most popular means of posting or distributing videos by far, accompanied by many individuals choosing to write in an answer related to the online teaching platform Moodle. DVDs, Media Mill, and Vimeo were all selected by far fewer respondents. iTunes can be ignored completely, with no one identifying it as a means for distributing videos.

When asked to “check all that apply” on a question asking, “Which video sources do you think you could use without concerns regarding adequate captioning?” 43 respondents selected YouTube, 40 chose a DVD from the UMD library, 38 had no concerns regarding captioning on Ted Talks, and 20 believed Khan Academy to be a safe bet. Many wrote in that they simply didn’t know.

153 individuals responded to the question, “How often do you create your own videos?” Just over 52% (80) answered “never”. However, approximately 41% (63) of respondents create their own videos 1-50% of the time. Overall, a 53% of faculty who participated in the survey create at least some of their own videos and 43% of the staff who responded create videos.

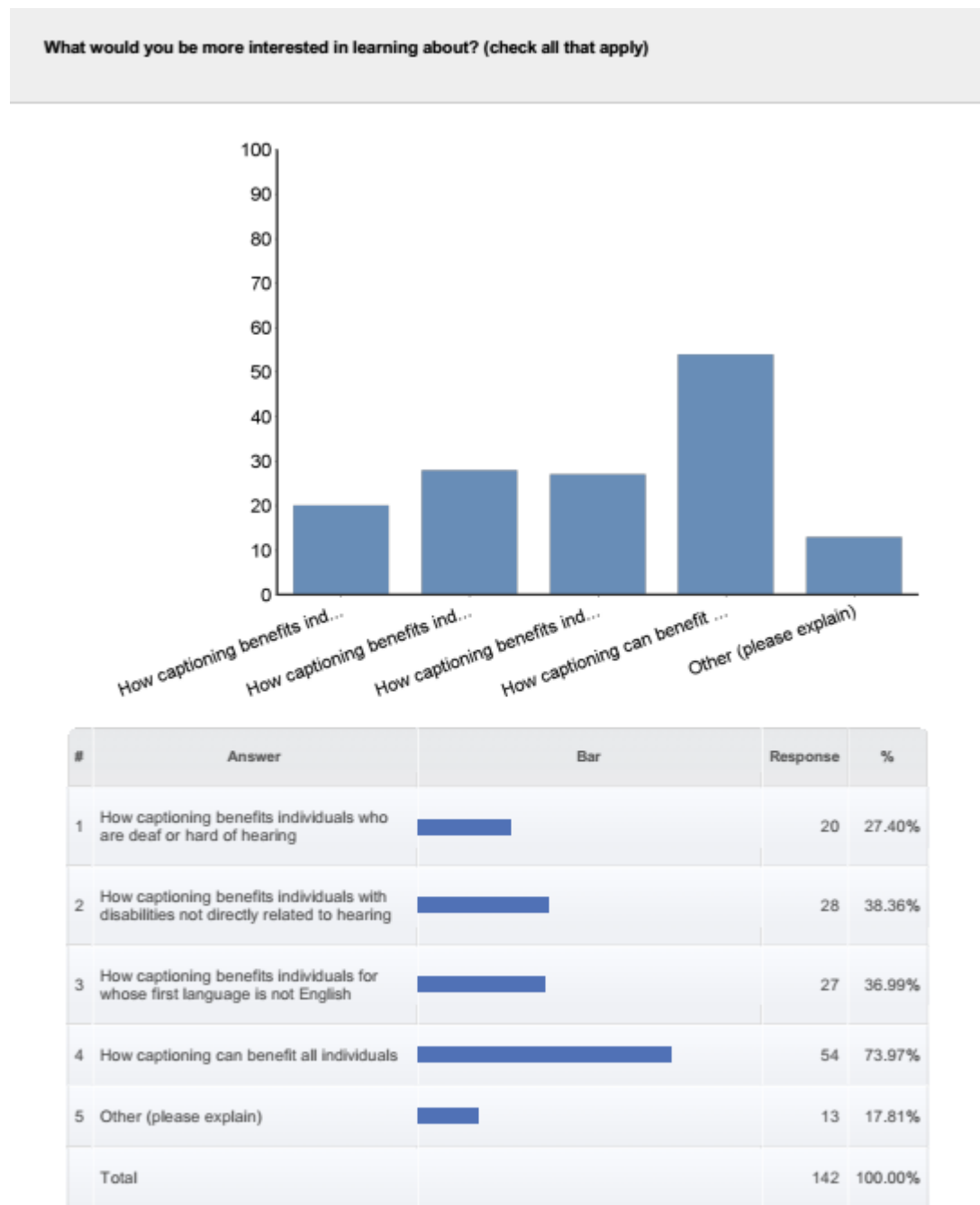
When looking for support regarding captioning, the most popular groups on campus for people turn to are the Multimedia Hub, other ITSS resources, or their department or unit's own staff. Only 16 individuals identified Disability Resources as a place to turn to for support.

The major issue identified when asked, “What are your biggest barriers when it comes to captioning video?” was lack of time, followed by lack of technical skills, lack of software or tools, and lack of funding, in that order. Copyright issues trailed behind. In the few written responses, survey takers generally expressed the desire to know more about where to turn for captioning support and knowledge. When asked how much time and expense captioning adds to the process of preparing videos, the general sentiment was “too much!”

110 survey respondents took the time to describe what benefits they thought captioning might provide. General accessibility was the dominant theme, but many also recognized benefits for individuals for whom English is not their first language. People also took note of times where captions could be useful in noisy environments and mentioned that captioning can also help when a video’s audio quality is poor. A few responses hit upon the general benefits of seeing the written word accompany spoken

language and another handful hinted at the legal requirements. Only two responses mentioned how captions can aid in enhancing the ability for viewers to search and find a video on the Internet. When asked, “What would you be more interested in learning about?” 54 individuals selected “How captioning can benefit all individuals.” 28 selected “How captioning benefits individuals with disabilities not directly related to hearing,” and 27 chose, “How captioning benefits individuals whose first language is not English.” Respondents were allowed to select multiple answers.

Table 4. Benefits of captioning that interest respondents the most



When it came time to share frustrations related to captioning at UMD, lack of general awareness regarding the issue of captioning and a culture where captioning

policy is inconsistently followed or enforced was frequently mentioned. Lack of resources, especially lack of time and money, were often repeated themes. One very frustrated respondent wrote, “It is such a hassle [sic] I hope I never have a student in my class again who needs captioning. It is so much additional work, I think I should get additional credit hours for courses where this is required.” Also prominent was a general feeling of not knowing where to turn with questions and not being sure where to find support on campus. People felt that the captioning process was too complex and often wished to be able to hand it off entirely to tech staff, but only if they could be guaranteed consistent, timely, and affordable results. Some complained that students in the multimedia hub did not always seem to know what they were doing and that the level of service varied greatly with who happened to be working at the time. Others felt that the captioning policy might discourage staff and faculty from creating their own videos. A handful of frustrations also arose out of misunderstandings related to what captioning is and what is required by the policy. For example, one person wrote, “If I have international student in my class along with a deaf student, am I then to create captioning in 4 or 5 different languages and then one for the deaf student?”

Very few respondents had success stories to share regarding captioning at UMD. Generally, people seemed pleased with the Library’s push to purchase materials that have already been captioned or their work to obtain the rights to caption existing videos. Others mentioned that editing automatically captioned materials on YouTube was easy enough or that they had discovered other methods that worked for them. A number expressed that having the policy in the first place was a success that ought to be celebrated.

Only two individuals volunteered to be interviewed. Both interview subjects were able to offer good historical information on captioning from the University's perspective. Both were very supportive of efforts to increase captioning compliance at UMD and felt that everyone should take responsibility for making sure that video materials are captioned. In general, the comments and ideas offered by the interview subjects were covered by the survey questions and responses or were outside the scope of this study.

Summary

This survey gathered responses from both faculty and staff on campus. Strengths and weaknesses regarding the current understanding and implementation of video captioning policy at the University of Minnesota Duluth were identified. Chapter five shall examine the educational implications and ideas for action generated by the survey results.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

Educational Implications and Ideas for Action

Most videos created, distributed, and shown at the University of Minnesota Duluth must be captioned. Increasingly, it is policy, if not the law, to do so (“Policy on captioning,” 2012). Neglecting to caption video materials could expose the University to potentially costly lawsuits. However, it is more than just concern regarding legal vulnerabilities that compels those at UMD to caption videos. There is a growing sense of commitment towards making education accessible to all that acts as a driving force behind UMD’s firm stance on captioning requirements (“Goal 2 advancing”).

The concept of accessibility includes not only basic access for deaf and hard of hearing individuals, but also embraces the cultural shift towards internationalizing the campus community (Schokker, 2013). As UMD welcomes greater numbers of individuals for whom English is not a first language into its fold, captioning of video is another way to ensure that these students and colleagues experience fewer barriers when attempting to understand video materials (Media Access Canada, 1994).

Indeed, enhancing the learning opportunities for more traditional students is yet another educational benefit of video captioning that is supported by research, but not yet widely known or acknowledged at UMD. If student grades at UMD could be improved simply by turning on captioning (as has been witnessed in other case studies) increased

compliance with captioning policy could be a win for not only deaf and hard of hearing individuals and for those originally from non-English speaking backgrounds, but it may be possible that truly everyone on campus could experience the positive effects of increased exposure to video captioning (“Video captions improve,” 2013).

UMD has a strong video captioning policy. What it now needs is a push to put the policy into action. The survey demonstrated that many on campus support the general concept of captioning video. What needs to be made absolutely clear is that this is something the University is serious about doing. Administrators and others in leadership roles across campus must take a firm stance on captioning requirements to help ensure consistency and to ease the concerns of those who feel that they are being forced to spend precious time and money only to discover that others across campus have yet to commit to the standard.

An improved communications plan regarding captioning policy must also be developed and implemented. Faculty and staff on campus should all be aware that the policy exists and they should be left with no questions on where to turn to for support. Clearer, more robust information must be made available on the UMD website, preferably with multiple departments and units all pointing towards a centralized resource. When staff and faculty work with the Multimedia Hub, the Library, Disability Resources or any other major source for video or accessibility support on campus, workers there must be trained to bring up the topic of captioning right from the start. Processes for professional captioning services handled by or outsourced through the University must be made as efficient as possible in order to reduce turnaround time.

The demand for technical training on video captioning must be met. For example, those who wish to caption their own videos should be taught how to take advantage of the ability to edit YouTube's automatic captions. Training should be offered via workshops and through one-on-one consultations. Those who request tools and support to comply with the policy must not be turned down.

Dedicated funding for video captioning exists to accommodate students with documented needs in specific classes, but does not exist for instructors who wish to proactively caption their videos. Nor is it always clear where to find funding for videos that are being used outside of a classroom setting. The University must actively seek out ways to reduce or eliminate funding barriers.

Recommendations for Future Research

This study only surveyed faculty and staff at the University of Minnesota Duluth. An obvious and a key voice missing from the research is that of students. In the end, students are the reason faculty and staff exist in the first place. Uncovering student experiences, perspectives, concerns, and hopes for video captioning policy at UMD could shed new and significant light onto how the policy is implemented across campus.

It is also possible that experiences with video captioning vary greatly across campus, depending upon the unit or department with which an individual is affiliated. Research that examines experiences within specific colleges or programs may uncover successes that could be used as models for others to follow, or could reveal particular hot spots where extra support for captioning might be useful. Because

this study was voluntary in nature, it is likely that ignorance about captioning or problems related to captioning are more serious than the results of this study imply. Research that targets those who may not respond to email requests for anonymous online survey participants could reveal details that may have been missed in this study.

As more and more classes go online, and as instructors increasingly add online video materials to their classes, the need for captioning will only grow. Quite a few instructors mentioned the online class platform “Moodle” in their survey responses. Research that examines captioning specifically in online teaching and learning settings will become especially important as courses shift to a virtual environment.

The trend of inverse instruction (otherwise known as “flipping the classroom”) also continues to grow in popularity. In this method of teaching, the student is generally provided with the course lectures in a video format to be watched on his or her own time outside of standard classroom hours. In order for these teaching methods to remain accessible to deaf and hard of hearing students, it is imperative that the video lecture be accurately captioned. Research on how schools are accommodating captioning needs while supporting flipped classrooms could reveal whether captioning is once again an afterthought or if it is something that is being handled adequately. If captioning is being done, sharing information on the best methods and practices could be tremendously useful for instructors looking to adopt flipped classroom teaching techniques.

Additionally, while there have been a few case studies on how captioning can benefit people other than deaf and hard of hearing individuals, more research is needed on the subject. If video captioning really can have a significant impact on learning, data demonstrating that fact could help build the case for captioning as a standard practice on all videos, leading to increased funding, tools, and training for video captioning.

Conclusion

UMD has taken the lead with the strongest video captioning policy in the University of Minnesota system. An excellent first step toward creating a more inclusive campus climate, this study is but the first phase in a project that will undoubtedly help create a more positive and welcoming culture for students, staff, and faculty at the University of Minnesota Duluth.

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Appendix A

IRB Materials

IRB Approval Email

The IRB: Human Subjects Committee determined that the referenced study is exempt from review under federal guidelines 45 CFR Part 46.101(b) category #2
SURVEYS/INTERVIEWS; STANDARDIZED EDUCATIONAL TESTS;
OBSERVATION OF PUBLIC BEHAVIOR.

Study Number: 1404E49603

Principal Investigator: Mandie Johnson

Title(s):

Captioning of Video at University of Minnesota Duluth

This e-mail confirmation is your official University of Minnesota HRPP notification of exemption from full committee review. You will not receive a hard copy or letter.

This secure electronic notification between password protected authentications has been deemed by the University of Minnesota to constitute a legal signature.

The study number above is assigned to your research. That number and the title of your study must be used in all communication with the IRB office.

Research that involves observation can be approved under this category without obtaining consent.

SURVEY OR INTERVIEW RESEARCH APPROVED AS EXEMPT UNDER THIS CATEGORY IS LIMITED TO ADULT SUBJECTS.

This exemption is valid for five years from the date of this correspondence and will be filed inactive at that time. You will receive a notification prior to inactivation. If this research will extend beyond five years, you must submit a new application to the IRB before the study's expiration date.

Upon receipt of this email, you may begin your research. If you have questions, please call the IRB office at [\(612\) 626-5654](tel:6126265654).

You may go to the View Completed section of eResearch Central at <http://eresearch.umn.edu/> to view further details on your study.

The IRB wishes you success with this research.

We value your feedback. We have created a short survey that will only take a couple of minutes to complete. The questions are basic, but your responses will provide us with insight regarding what we do well and areas that may need improvement. Thanks in advance for completing the survey. <http://tinyurl.com/exempt-survey>

Participant Email

Subject: Help make videos accessible to everyone at UMD

Greetings!

Would you like to help make UMD a more welcoming place? Whether you assign videos, create videos, or just watch videos, your help is needed to ensure that videos are accessible to everyone at UMD.

Faculty and staff are invited to participate in an anonymous online survey that examines issues surrounding captioning of video here at UMD. This quick survey is completely optional. By participating, you'll help us discover what's working in regards to captioning. More importantly, your answers will help us identify ways in which we can improve video captioning access and awareness.

To participate in the anonymous survey regarding video captioning at UMD, please click on the following link:

<link>

This survey is part of a thesis research study conducted by Amanda L. Johnson, a master's student in the Department of Education at UMD. If you have any questions or

concerns regarding this study, please contact me at 218-726-8860
or aljohnso@d.umn.edu. My research advisor is Terrie Shannon, faculty in the UMD
Department of Education. Terrie can be reached at 218-726-6349
or tshannon@d.umn.edu.

Thank you for taking the time to make UMD a more welcoming place for all students,
staff, and faculty.

INFORMATION SHEET FOR RESEARCH

Captioning of Video at the University of Minnesota Duluth

You are invited to participate in a research study on captioning of videos used in classes
and in official public communications at UMD. You were selected as a possible
participant because you are a staff or faculty member employed by UMD. We ask that
you read this form and ask any questions you may have before agreeing to be in the
study.

This study is being conducted by: Amanda L. Johnson, a student in the Master of
Education program in the Department of Education at the University of Minnesota
Duluth.

Procedures:

If you agree to be in this study, I would ask you to do the following things: I would ask you to participate in an online survey of approximately 25 questions on the subject of captioning of video at UMD. The survey will include questions on captioning policy awareness, compliance, captioning tools and services, and barriers encountered when captioning videos for use at UMD.

Confidentiality:

The online survey is anonymous. Participants will be asked to contact the PI if they wish to volunteer to participate in an interview to provide further information about their experiences related to captioning of videos.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota Duluth. If you decided to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher(s) conducting this study is Amanda L. Johnson. You may ask any questions you have now. If you have questions later, you are encouraged to contact Amanda L. Johnson at the University of Minnesota Duluth, (218) 726-8860 or aljohnso@d.umn.edu. My research advisor is Terrie Shannon, Faculty, UMD Department of Education, (218) 726-6349 or tshannon@d.umn.edu. Thank you.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

You will be given a copy of this information to keep for your records.

Appendix B

Survey Questions and Responses

INFORMATION FOR RESEARCH

Captioning of Video at the University of Minnesota Duluth

You are invited to participate in a research study on captioning of videos used in classes and in official public communications at UMD. You were selected as a possible participant because you are a staff or faculty member employed by UMD. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Amanda L. Johnson, a student in the Master of Education program in the Department of Education at the University of Minnesota Duluth.

Procedures:

If you agree to be in this study, I would ask you to do the following things: I would ask you to participate in an online survey of approximately 25 questions on the subject of captioning of video at UMD. The survey will include questions on captioning policy awareness, compliance, captioning tools and services, and barriers encountered when captioning videos for use at UMD.

Confidentiality:

The online survey is anonymous. Participants will be asked to contact the Principal Investigator if they wish to volunteer to participate in an interview to provide further information about their experiences related to captioning of videos.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota Duluth. If you decided to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Amanda L. Johnson. You may ask any questions you have now. If you have questions later, you are encouraged to contact Amanda L. Johnson at the University of Minnesota Duluth, (218) 726-8860 or aljohnso@d.umn.edu. My research advisor is Terrie Shannon, Faculty, UMD Department of Education, (218) 726-6349 or tshannon@d.umn.edu. Thank you.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

My primary role at UMD is:

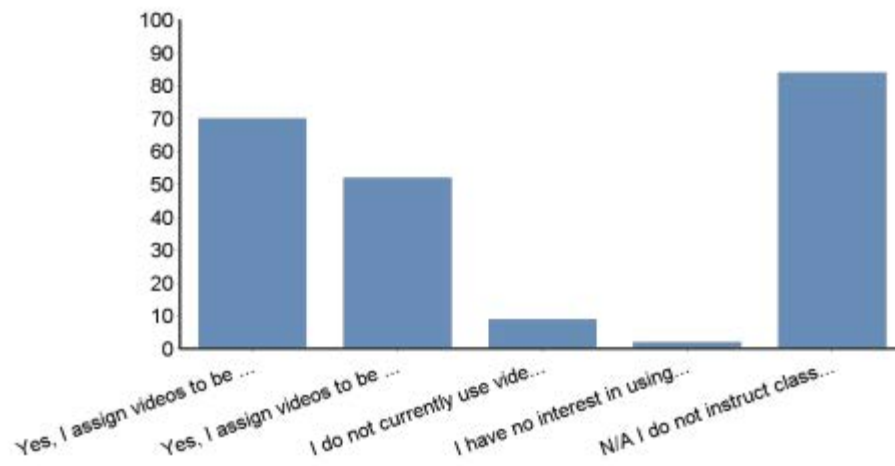


#	Answer	Bar	Response	%
1	Faculty	<div></div>	69	39.88%
2	Staff	<div></div>	98	56.65%
3	Other (explain)	<div></div>	6	3.47%
	Total		173	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	3	1.64	0.30	0.55	173	173

Other (explain)
Both faculty and staff (P&A)
Administrator
Student/Staff
Staff but also teach courses for credit
Faculty emeritus (have used videos extensively)
administrator

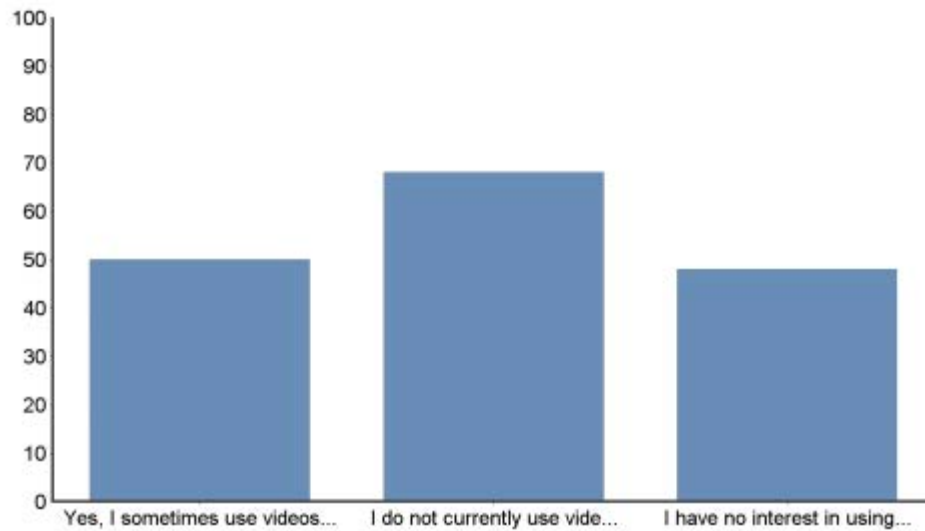
Do you use videos in your classes at UMD?



#	Answer	Bar	Response	%
1	Yes, I assign videos to be watched in class	<div></div>	70	40.46%
2	Yes, I assign videos to be watched outside of class hours	<div></div>	52	30.06%
3	I do not currently use videos in my classes, but am interested in doing so	<div></div>	9	5.20%
4	I have no interest in using videos in my classes	<div></div>	2	1.16%
5	N/A I do not instruct classes at UMD	<div></div>	84	48.55%
Total			217	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	5	2.90	3.09	1.76	217	173

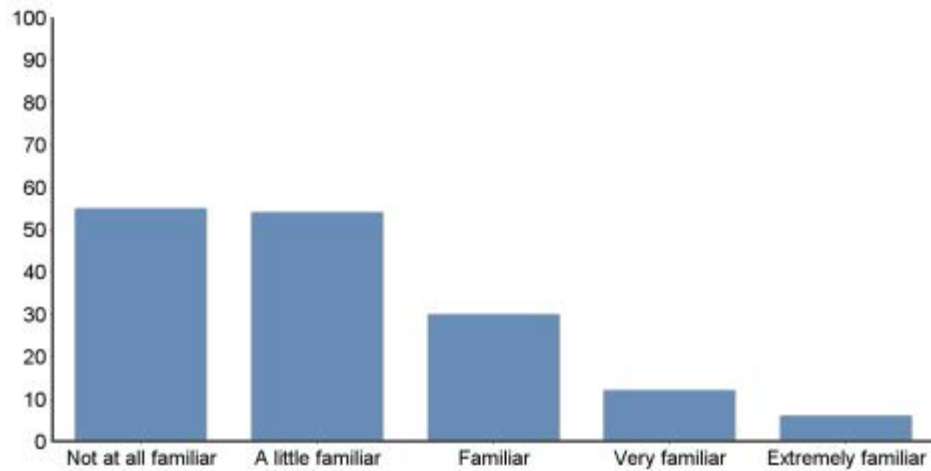
Do you ever include the use of videos in official public communications at UMD?



#	Answer	Bar	Response	%
1	Yes, I sometimes use videos in my official public communications at UMD (outside of a specific class)	<div></div>	50	30.12%
2	I do not currently use videos in my official public communications, but am interested in doing so	<div></div>	68	40.96%
3	I have no interest in using videos in official public communications	<div></div>	48	28.92%
Total			166	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	3	1.99	0.59	0.77	166	166

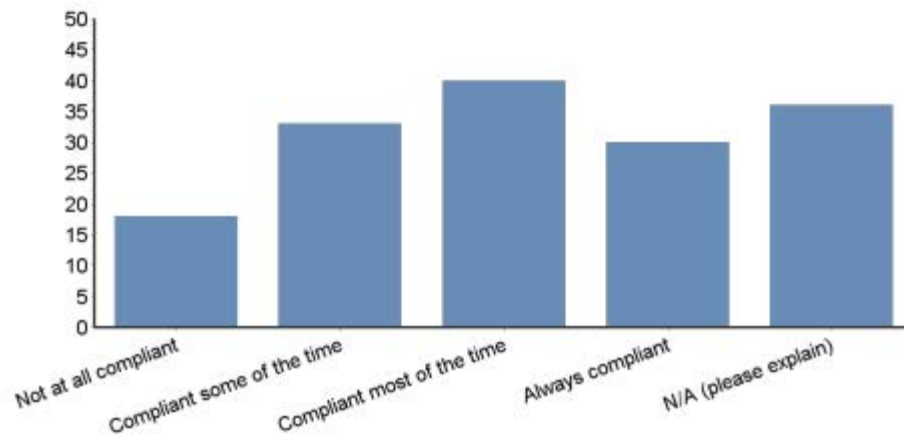
Prior to this survey, how familiar were you with UMD's policy on the captioning of video?



#	Answer	Bar	Response	%
1	Not at all familiar	<div></div>	55	35.03%
2	A little familiar	<div></div>	54	34.39%
3	Familiar	<div></div>	30	19.11%
4	Very familiar	<div></div>	12	7.64%
5	Extremely familiar	<div></div>	6	3.82%
Total			157	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	5	2.11	1.19	1.09	157	157

Having read the captioning policy, how would you rate your compliance up to this point?

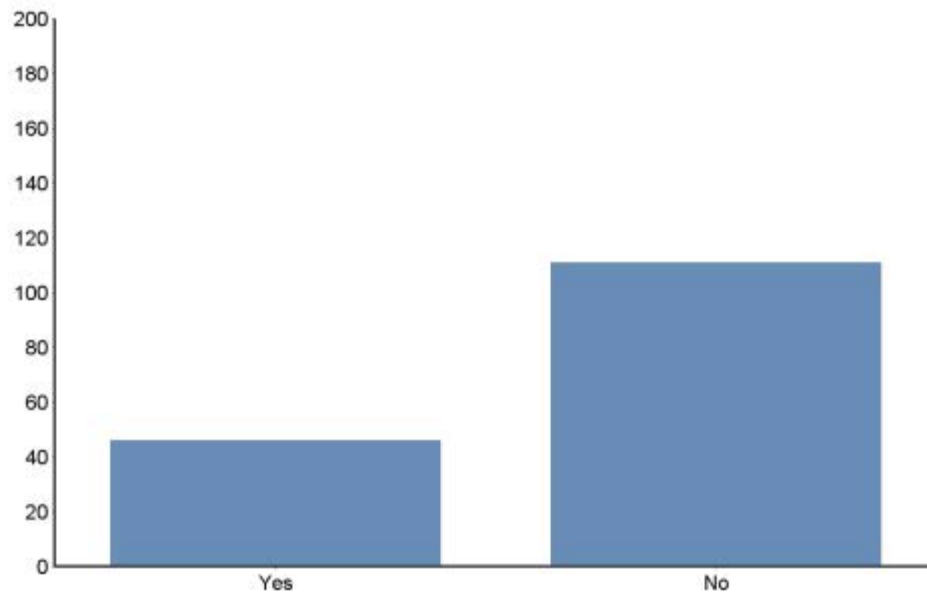


#	Answer	Bar	Response	%
1	Not at all compliant	<div></div>	18	11.46%
2	Compliant some of the time	<div></div>	33	21.02%
3	Compliant most of the time	<div></div>	40	25.48%
4	Always compliant	<div></div>	30	19.11%
5	N/A (please explain)	<div></div>	36	22.93%
Total			157	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	5	3.21	1.74	1.32	157	157

N/A (please explain)
I haven't yet created or presented instructional video at UMD, but have elsewhere.
I don't recall ever having a student who required captioning. Would this be brought to my attention in the disability paperwork?
used for marketing and not courses - my experience assisting instructors' video materials were restricted access by students and not publicly available
Most of the videos I show have no sound. The one that does have sound is an old VHS tape. I have no idea how you would caption it.
I have never used video
Haven't made any videos
we do not currently use video
I do not produce videos.
don't use videos
I only use videos provided by the Library.
Not used video yet
do not use video at this time
I do not create or teach with videos.
I am although faculty may advise need for captioning during converting items.
Haven't ever used video
Videos used are not for instructional purposes, nor external relations. For internal informational purposes
I didn't read the captioning policy
Do not teach classes; all communications (email, signage, etc.) are in written format.
I do not use videos
unsure of the issues
I don't currently use any videos for university related use.
I do not use videos
I approached UMD's access center / disability services about 5 years ago and asked for help with captioning because the day before class started, I learned that I had a student who needed an accommodation. Not a lot of people knew how to help and it was a long process, in the end, I was told captioning was not available. I ended up taking the videos out of my course at the last minute (after the course had already started) I found it to be rather frustrating, but I know dis. services was doing their best at the time. Anyway, I cannot rate my compliance because your survey does not allow that plus a comment, and there is not indication that I will have the chance to leave a comment later, so I have decided to leave one while I have the chance. Also, the previous question "Prior to this survey, how familiar..." My answer depends on whether you are referring to this specific 2012 policy (my assumption) or not. I was very familiar with UMD's policy around 2009 or so, when I began looking for help captioning my video. I had no idea that this new policy came about in 2012. These may be some sources of measurement error in your survey.
I don't use videos in my position.
has not applied to what I do
having taught a class in awhile
Have not used video
Have never done a video
Have not yet used any video, but am interested in doing so.
I don't teach and therefore don't use videos
Don't instruct classes
I have not used videos, but I am interested in doing so
I am not a teacher but fully encourage the use so as to make the information accessible to all.

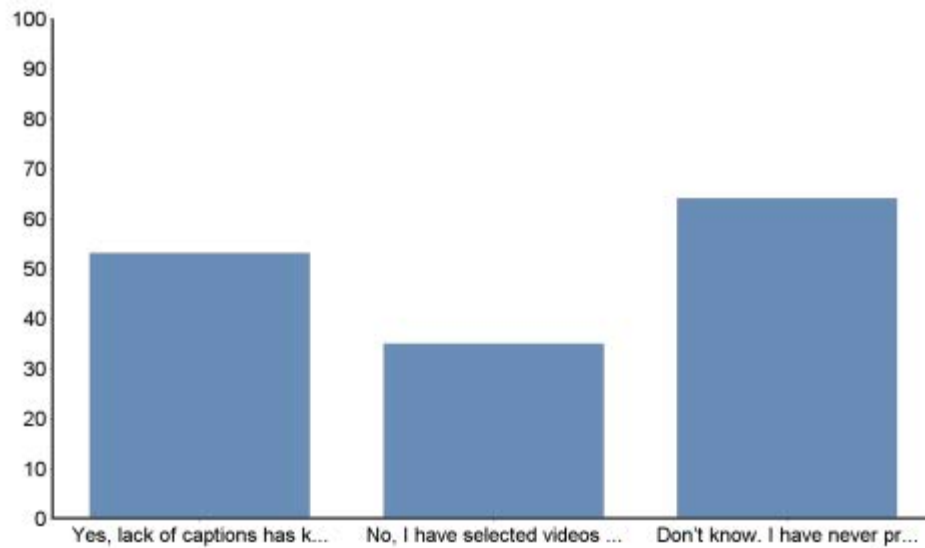
In your role at UMD, have you ever broadcasted video live to the internet or have you considered doing so?



#	Answer	Bar	Response	%
1	Yes	<div></div>	46	29.30%
2	No	<div></div>	111	70.70%
Total			157	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	2	1.71	0.21	0.46	157	157

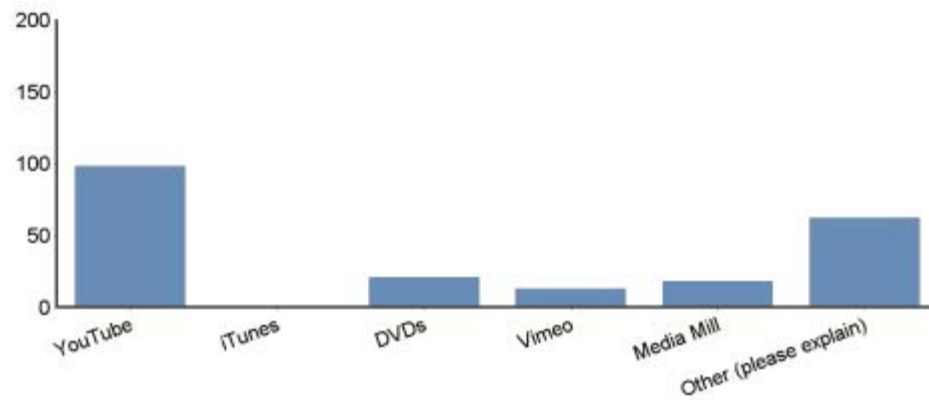
Have you ever decided against showing or distributing a video at UMD because it was not captioned?



#	Answer	Bar	Response	%
1	Yes, lack of captions has kept me from using a video	<div></div>	53	34.87%
2	No, I have selected videos knowing they were not captioned	<div></div>	35	23.03%
3	Don't know. I have never previously taken captioning into consideration	<div></div>	64	42.11%
Total			152	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	3	2.07	0.77	0.88	152	152

What are your most common means of posting or distributing videos?

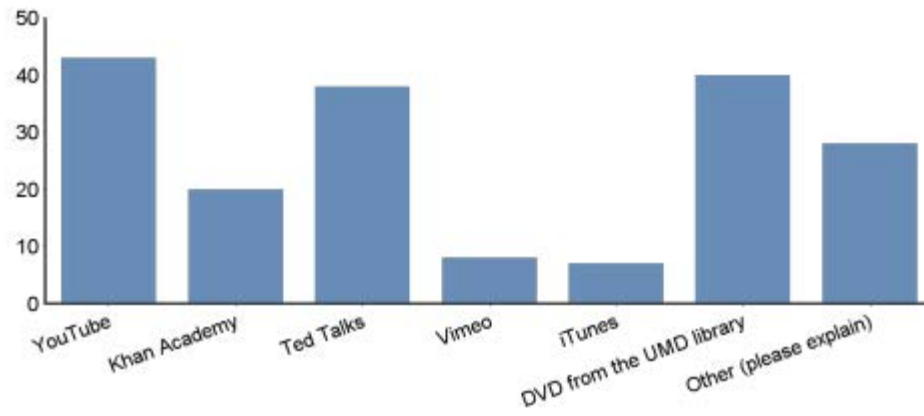


#	Answer	Bar	Response	%
1	YouTube	<div></div>	98	66.22%
2	iTunes		0	0.00%
3	DVDs	<div></div>	21	14.19%
4	Vimeo	<div></div>	13	8.78%
5	Media Mill	<div></div>	18	12.16%
6	Other (please explain)	<div></div>	62	41.89%
Total			212	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	6	3.18	4.87	2.21	212	148

Other (please explain)
NA
kaltura videos on moodle
Show in class; outside of class, students are required to purchase DVDs (for a particular class that revolves around a television show)
just use one short mpeg in a PowerPoint
Med School's BlackBag, Course videos w/in Moodle
I do not do this
Moodle
flyers
screencast.com
Direct playback from iPad recording
Kaltura via Moodle; UMConnect
website
website
in class
Dept webpage
Video Boards/Website
I don't post or distribute videos.
they are on our LSBE website - but stored at YouTube
I don't post videos
Book Publisher
I don't post videos
I don't post videos on the Internet, they are just used in the classroom.
Moodle/Kaltura
Don't post; department owned DVDs are what was available at time of purchase.
TED talks
I do not use videos
n/a
Moodle
Haven't distributed video
Link to Video in Google Drive
youtube for personal use
Short videos or animations on Moodle
Moodle, UMConnect
I don't distribute videos. In class we watch videos from DVDs, YouTube, and VHS tapes
QuickTime files stored on local (UMD) mainframe
Not applicable
embedded in PowerPoint
In house mechanism for posting videos of lectures
adobe presenter via Moodle
Showing instructional videos in class or linked via Moodle
embedded YouTube on website
Watch in class
I do not post, only use videos that are already online.
Moodle
imbedded
Website, or Social Media - like Facebook.
kaltura in moodle
never have
I don't post videos. It has been done for me and I don't know what means they use.
Not applicable
View More

Which video sources do you think you could use without concerns regarding adequate captioning (Check all that apply)

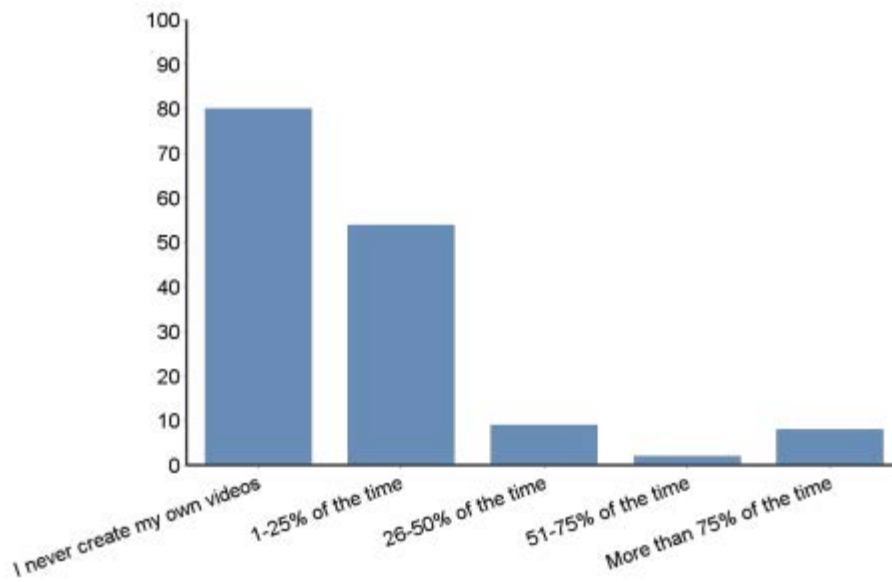


#	Answer	Bar	Response	%
1	YouTube	<div></div>	43	39.81%
2	Khan Academy	<div></div>	20	18.52%
3	Ted Talks	<div></div>	38	35.19%
4	Vimeo	<div></div>	8	7.41%
5	iTunes	<div></div>	7	6.48%
6	DVD from the UMD library	<div></div>	40	37.04%
7	Other (please explain)	<div></div>	28	25.93%
Total			184	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	7	3.80	5.01	2.24	184	108

Other (please explain)
none right?
NA
I don't know
I am not tech savvy
see above
TV
it would depend in all of these cases on whether the specific video was captioned adequately
none of the above
None of the above
Moodle Kaltura if I know no students in course need captioning
I wish all video sources were close captioned, but they aren't - so I always have concerns
n/a
I don't understand the question - not sure if this is asking about my ability to use uncaptioned videos
Not applicable
?
I would always be concerned. If any of these sources always provide captioning, I am not aware of it.
no idea
I don't use any of these
I'm not familiar with the accuracy of their captioning.
Not applicable
None of the above. All need to be verified.
Haven't looked into it
None
don't know
don't know
don't know
Don't know

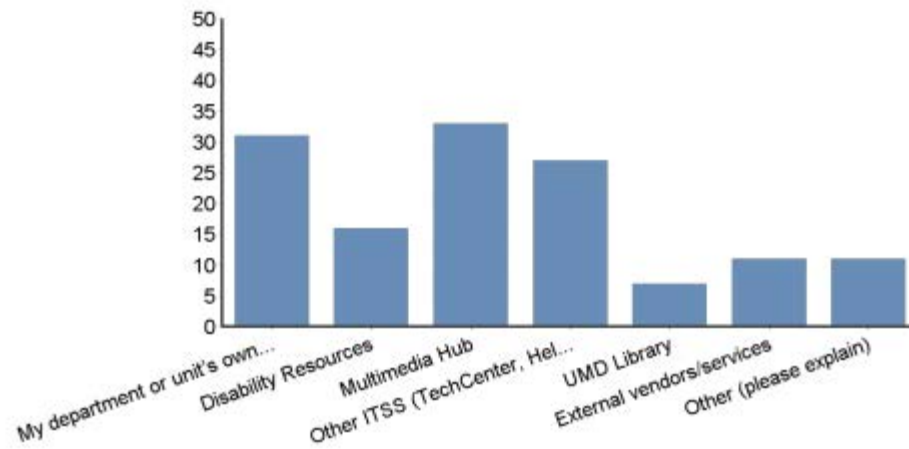
How often do you create your own videos?



#	Answer	Bar	Response	%
1	I never create my own videos	<div></div>	80	52.29%
2	1-25% of the time	<div></div>	54	35.29%
3	26-50% of the time	<div></div>	9	5.88%
4	51-75% of the time	<div></div>	2	1.31%
5	More than 75% of the time	<div></div>	8	5.23%
Total			153	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	5	1.72	1.03	1.02	153	153

What groups on campus have you used for support regarding captioning? (Check all that apply)

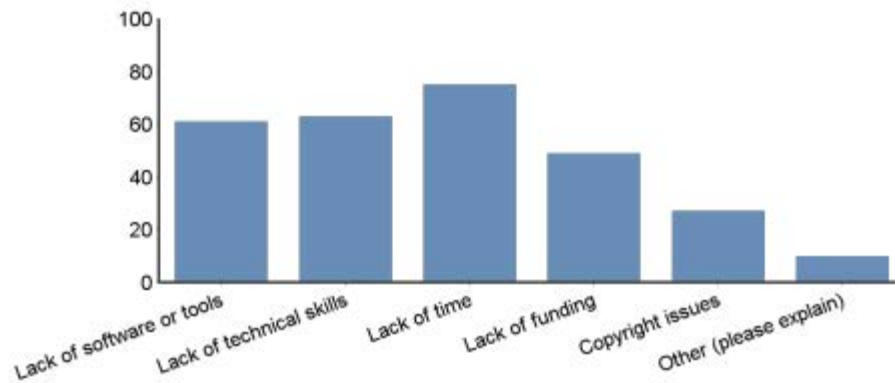


#	Answer	Bar	Response	%
1	My department or unit's own staff	<div></div>	31	41.33%
2	Disability Resources	<div></div>	16	21.33%
3	Multimedia Hub	<div></div>	33	44.00%
4	Other ITSS (TechCenter, HelpDesk, staff, etc.)	<div></div>	27	36.00%
5	UMD Library	<div></div>	7	9.33%
6	External vendors/services	<div></div>	11	14.67%
8	Other (please explain)	<div></div>	11	14.67%
	Total		136	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	8	3.38	4.07	2.02	136	75

Other (please explain)
Never asked for help
People who volunteered because the video captioning provided by UMD was wholly unsatisfactory.
Never asked for support
for marketing purposes
If I have a student who needs close captions then I don't use my own videos. I would like to anyway because it benefits others!
I have not used support as I do not use it
No idea there was help
Diversity Commission
I've been in communication with the MultiMedia Hub to caption a video for our office. Haven't had time to do this yet.
You!

What are your biggest barriers when it comes to captioning video? (Check all that apply)



#	Answer	Bar	Response	%
1	Lack of software or tools	<div></div>	61	57.55%
2	Lack of technical skills	<div></div>	63	59.43%
3	Lack of time	<div></div>	75	70.75%
4	Lack of funding	<div></div>	49	46.23%
5	Copyright issues	<div></div>	27	25.47%
7	Other (please explain)	<div></div>	10	9.43%
Total			285	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	7	2.85	2.18	1.47	285	106

Other (please explain)
It seems that you should be able to go to UMD tech support services and say that you have a student to accommodate and they should be able to help; I am glad this is the case now (per the 2012 policy), but it was not the case as little as 5 years ago, so I'd say lack of support from UMD's tech support staff and dis. services- which was probably due to a lack of support to them
Lack of knowledge on proper procedures
Original material not captioned
adding captioning can reduce the quality of the output
Valuable videos are not captioned
time !!!!
Didn't know we should
Information about available help/services; ability to add captioning at the end of a project
Would like to know what is available to me and how I can use it
Learn how

What sort of tools, software, and methods are you currently using to caption video?

[illegible]

Text Entry
NA
YouTube captioning feature. Editing the auto caption
Camera/video, Quicktime, Youtube, MediaMill/Moodle postings (previous exp)
N/A
Camtasia Studio 8, YouTube (correcting their auto-captioning)
Camtasia
Nothing on my own
The Hub. Direct captioning in Apple iMovie.
N/A
student workers, youTube closed captioning tool, supervised by our IT person.
View More

Statistic	Value
Respondents	75

If you currently create and caption your own videos, approximately how much time and expense does captioning add to the process of preparing your videos for distribution and viewing?

[880.32%](#)
[Able](#)
[Ability](#)
[Add](#)
[Add'l](#)
[Additional](#)
[Advances](#)
[Ahead](#)
[Automatic](#)
[Award](#)
[Biggest](#)
[Celebrate](#)
[Changes](#)
[Considerable](#)
[Consuming](#)
[Critical](#)
[Crisis](#)
[Crazy](#)
[Creative](#)
[Current](#)
[Cups](#)
[Deadlines](#)
[Department](#)
[Double](#)
[Editing](#)
[Ellen](#)
[Employees](#)

[Engineer](#)
[Experiences](#)
[Family](#)
[Father](#)
[Funding](#)
[Future](#)
[Fyi](#)
[Glow](#)
[High](#)
[Hours](#)
[He's](#)
[Huge](#)
[Images](#)
[Impossible](#)
[Intended](#)
[Issue](#)
[The](#)
[Learning](#)
[Leave](#)
[Lesson](#)
[Length](#)
[Listen](#)
[Made](#)
[Male](#)
[Material](#)
[Shut](#)
[Mac](#)
[M5000](#)
[Pda](#)
[Plan](#)
[Random](#)
[Reactions](#)
[Present](#)
[Planning](#)
[Point](#)
[Pier](#)
[Position](#)

[Practice](#)
[Presence](#)
[Profession](#)
[Project](#)
[Quality](#)
[Reaching](#)
[Requirement](#)
[Restrictions](#)
[Ride](#)
[Single](#)
[Start](#)
[Sellers](#)
[Significant](#)
[Start](#)
[Student](#)
[Studio](#)
[Suggest](#)
[Takes](#)
[Tanght](#)
[Teaching](#)
[Ten](#)
[Tensured](#)

[Time](#)
[Times](#)
[Used](#)
[Unsure](#)

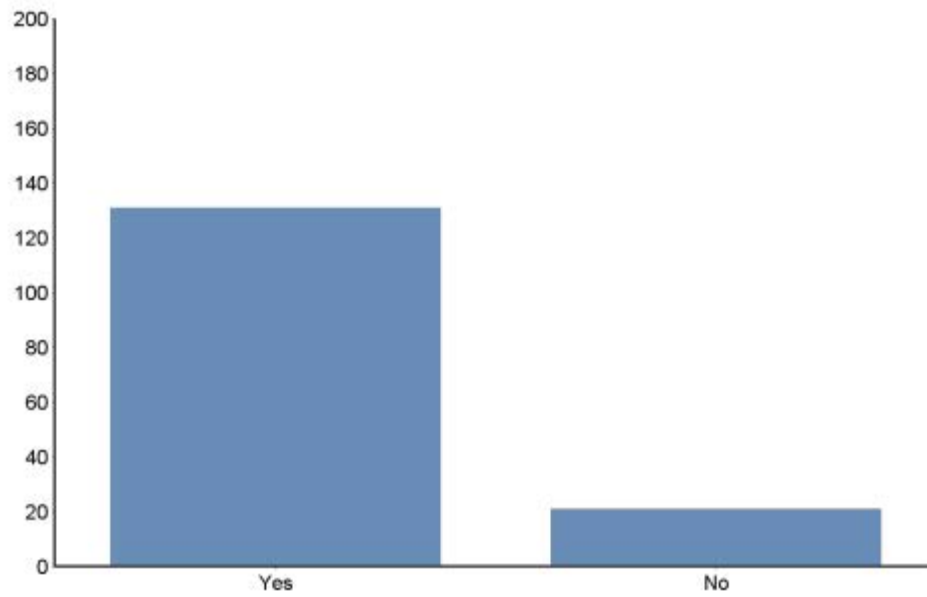
[Video](#)

[Week](#)
[Web](#)
[Whether](#)
[Whether](#)
[2](#)
[10](#)
[10](#)
[25](#)

Text Entry
NA
N/A
Too much time. Time consuming to listen to the video and caption. Also time consuming to make a script ahead of time
Some are automatic but of poor quality, high quality takes time!
N/A
I don't know that I have the ability to do this. And even then, I am certain that I do not have the time. The biggest needs are in the biggest classes - which are taught by contract employess with double the number of classes of tenured faculty. This is impossible.
It took me 2 hours to add captions to a 10-minute video! But I got faster with more experience.
N/A
??
20 min no expense
View More

Statistic	Value
Respondents	45

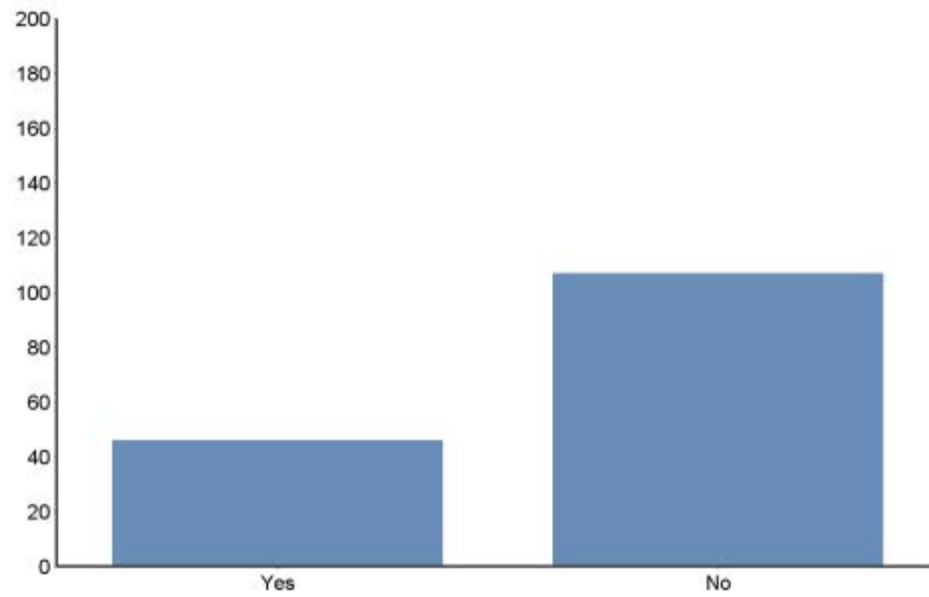
Have you ever personally watched captioning on video before?



#	Answer	Bar	Response	%
1	Yes	<div style="width: 86.18%;"></div>	131	86.18%
2	No	<div style="width: 13.82%;"></div>	21	13.82%
	Total		152	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	2	1.14	0.12	0.35	152	152

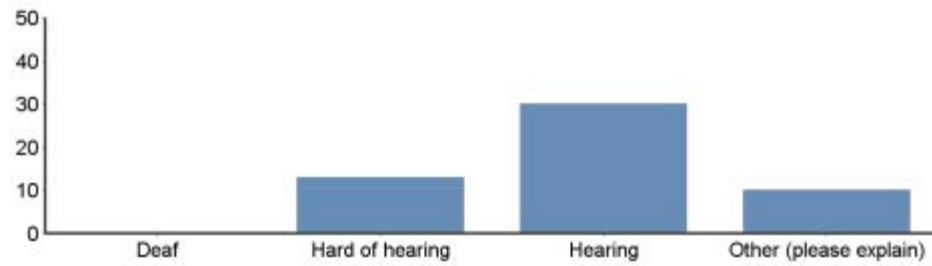
Do you know the difference between open and closed captioning?



#	Answer	Bar	Response	%
1	Yes	<div style="width: 30.07%;"></div>	46	30.07%
2	No	<div style="width: 69.93%;"></div>	107	69.93%
	Total		153	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	2	1.70	0.21	0.46	153	153

Do you personally identify as any of the following?

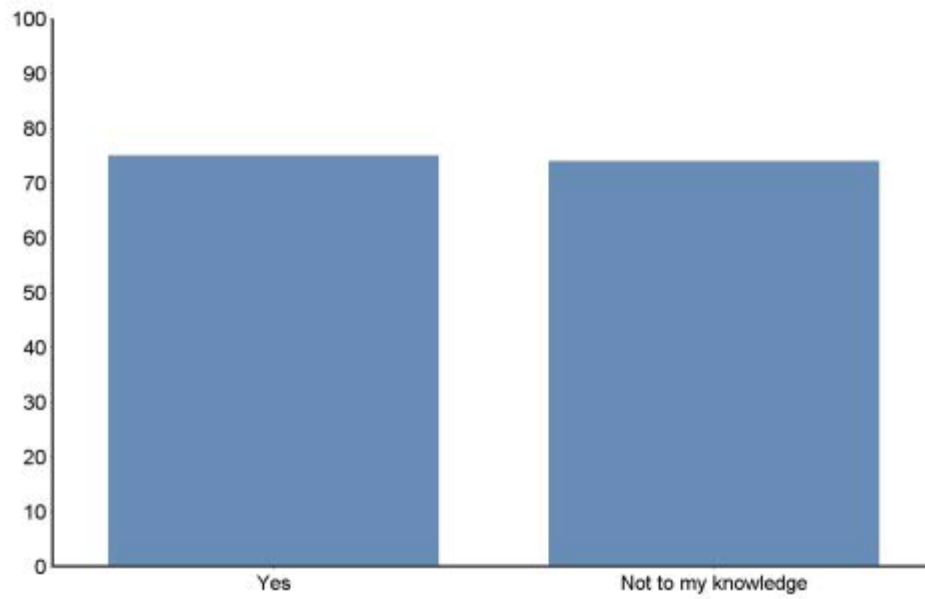


#	Answer	Bar	Response	%
1	Deaf		0	0.00%
2	Hard of hearing	<div></div>	13	24.53%
3	Hearing	<div></div>	30	56.60%
4	Other (please explain)	<div></div>	10	18.87%
Total			53	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
2	4	2.94	0.44	0.66	53	53

Other (please explain)
how to do I answer no to this item? I am not allowed to remove my answer. I don't identify as any of these or an "other"
n/a
I do not have any disability
Advocate for those with disabilities
None
I've experienced minimal hearing loss; and am concerned for the future of my hearing.
None
No
none

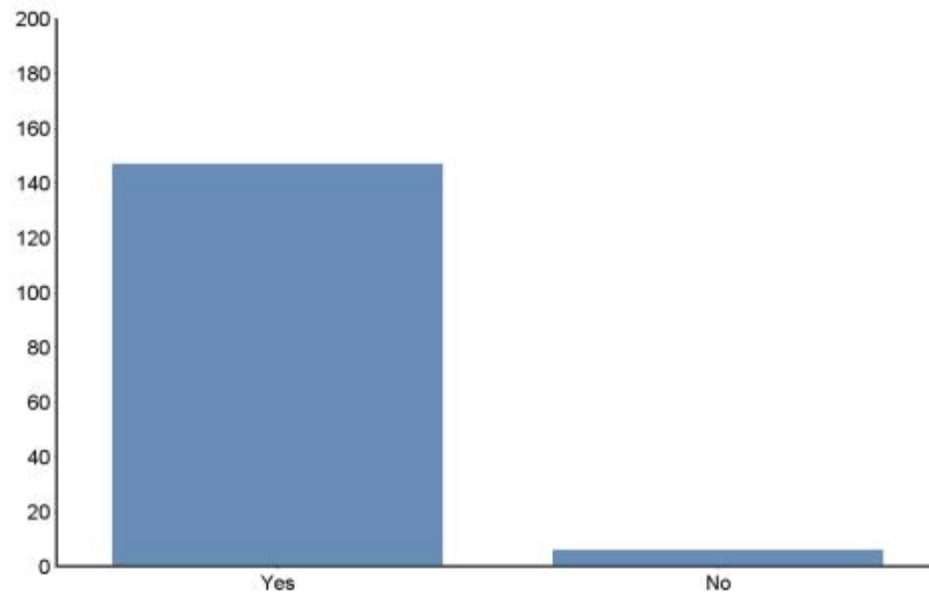
Have you ever had a co-worker or a student in your class who identified as either deaf or hard of hearing?



#	Answer	Bar	Response	%
1	Yes	<div></div>	75	50.34%
2	Not to my knowledge	<div></div>	74	49.66%
Total			149	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	2	1.50	0.25	0.50	149	149

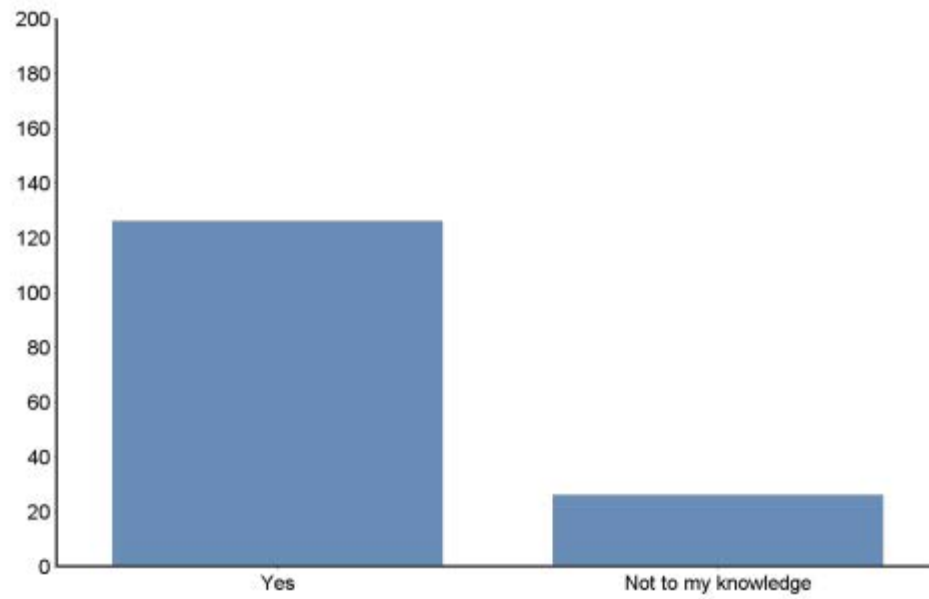
Is English your first language?



#	Answer	Bar	Response	%
1	Yes	<div></div>	147	96.08%
2	No	<div></div>	6	3.92%
	Total		153	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	2	1.04	0.04	0.19	153	153

Have you ever had a co-worker or a student in your class whose first language was not English?



#	Answer	Bar	Response	%
1	Yes	<div></div>	126	82.89%
2	Not to my knowledge	<div></div>	26	17.11%
Total			152	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	2	1.17	0.14	0.38	152	152

Please describe what benefits you think captioning may provide:

Access

Ability Additional Aisle Audience Audio Auxiliary Audit Audited Barriers Beneficial Captioning Clearly Closed Communication Compromised Content Create Distal Design Disability Delivering Easily Education Effectively Enables English Environment Equal Ed Experiences Family First Good Great Group Hard Hearing Helpful Idea Important Indicate Increase Individuals Information Issues Language Lessons Learning Listening Makes Material Means Moments Notice Needed Nifty Obvious Opportunities Participate Person Policy Presented Problems Process Provide Quiet Reach Reading Return Search Situation Special Speech Speakers Specific System Staff Students Task Training Technology Time Topic Turn Two Two-Dimensional Understand Universal Users User Users Visual Volume Watch Words Working

Text Entry
It is about access and inclusion...seems a no-brainer for a university.
You understand what the topic is, with understanding comes consideration of the topic.
Captioning can allow access to videos for folks who are Deaf or Hard of hearing. They can also provide a good source of information for non-English language users.
It helps everyone, not just deaf students and those learning English.
Accessibility for all
Allow all students to gain the information provided.
It is the right thing to do for users who have a disability or benefit from Universal design aspects such as easier understanding for ESL students or watching in a space that doesn't allow noise (quiet study space and no headphones available).
Captioning provides access to videos for those with hearing disabilities or language barriers.
Accessibility
Captioning provides access for individuals who have a hearing loss and/or problems with auditory processing, but also can be helpful for those with hearing in a noisy environment and those whose first language is not English.
View More

Statistic	Value
Respondents	110

Do you have any frustrations to share regarding captioning at UMD? (please describe)

& Rally Residents Rescues Assassination Assassin Rejoins Additional Assistance Assistants Automatic Beaver Campus Campaign

Captioning

Gives Glib Conquits Cool Curses Creating Credit Clinical Deal Deals Difficult Difficulty Disturbing

Gas Eaters Easy Encourages End Existing Expensive Explained Family Fallen Frustrating Funding Guest/Guest Hybrid Harvestly Hope Hub Idea Identified Impossible Includes Know Look Live Made Make Most Modest Multimedia No Needed/Others Open Part Play People Personally

POLICY Pests Pretty Previous Problem Promoted/Publish Quality Real Rules Rewarded Required Resources Responses Will Small Refrains Staff Student Support System Takes Tweeting Tricked Technology Things TIME Used Upon Underworld Ltd Video

Widely Work Years You/Your

	Text Entry
NA	
I don't think captioning is encouraged. I only knew about it because I had a deaf student in a class and her interpreter mentioned it to me.	
I think it would be really helpful to have more awareness brought to faculty. And workshop to help faculty do this.	
I am frustrated that Youtube is used widely throughout the campus in many academic classes and the captioning for these videos are horrible.	
Cost and software	
no	
Do not know where I would go if I needed captioning for a class.	
Yes, it's very time-consuming to do it yourself, and expensive to pay to have it done.	
The difficulty of replacing all my past tapes/DVDs that have been made without this policy in mind.	
no.	
Don't know where to go for it, how much it costs, how much time it takes.	
Yes. People don't do it as consistently as they should.	
No.	
It is unfair that UMD requires it but UMN does not. It should be a system-wide policy. It cripples UMD's ability to keep up with other campuses.	
Not enough faculty and staff are aware of the policy and think of captioning as a "bother".	
None.	
Captioning should be a free service provided by UMD. Funding support should be provided regardless of whether or not a disability resources student is enrolled in the course.	
prevents freedom of artistic expression	
No.	
It is such a hassle I hope I never have a student in my class again who needs captioning. It is so much additional work, I think I should get additional credit hours for courses where this is required.	
	View More

Statistic	Value
Respondents	81

Do you have any success stories to share regarding captioning at UMD? (please describe)

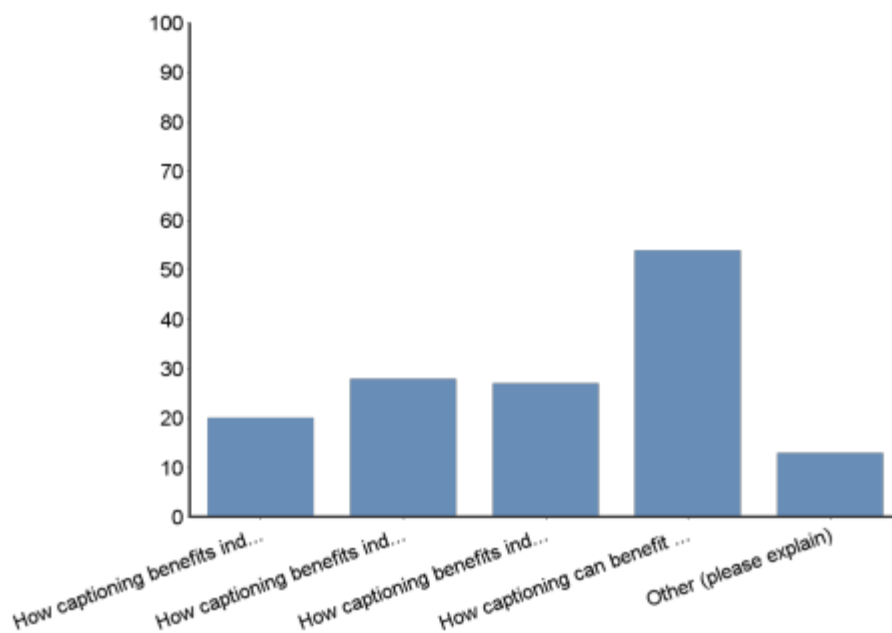
Captioning

Add Address Assign Assignments Associate Asst Audio Book Blog
On Open Outline Outlets Copy Content Creator Current Deal Directly Edit Editable Effects Elements Ensure Editor Entry European
Excel Explain Feature Filed Film Films French Foundation Fur Helping Hypothetical Information Interaction Last Languages Learned Left Library Listener Make Made Method MB Miscellaneous Misdemeanors No Native Obsolete Occurring Online Option Outcome Part Policy
Piazza Preview Customs Research Really Review Script Section Services Short Situation Specific States Student Success Successfully Summary Support Table Tool Time Topic Trade Transcribe Type UMMS University User
Video
Videos Viewing Watch What Youtube Y

Text Entry
NA
UMD library's obtaining the right to caption videos
One situation I can share is that if you have a video that is not captioned and you bring it to the Library to have captions added you will always have a back-up copy of that video at the library.
My current method seems to work for my needs. YouTube auto caption with edits
I like your research topic!
No. Only stories of utter, time wasting, frustration.
I learned how to use Video Ant (available through the University if you use Media Mill) to add annotations to videos. You type in an outline of the video in text, which forms a "table of contents". You can add the entire script of the video (if you have a deaf student and need captioning) or just a brief summary of each section. The text is hyperlinked to the video, so you can go directly to the specific part of the video you want to watch.
no.
Using captioning in online quizzes about specific scenes in feature films and in helping students to explore cultural misunderstandings occurring in first contacts between Native Americans and Europeans. (Films using captions to translate Algonquin languages and French during fur trade and missionary encounters.)
no
View More

Statistic	Value
Respondents	39

What would you be more interested in learning about? (check all that apply)

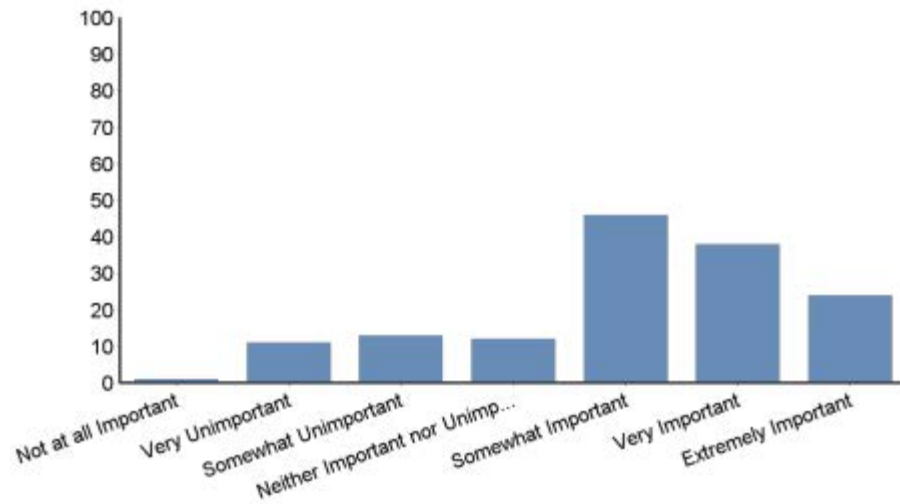


#	Answer	Bar	Response	%
1	How captioning benefits individuals who are deaf or hard of hearing	<div></div>	20	27.40%
2	How captioning benefits individuals with disabilities not directly related to hearing	<div></div>	28	38.36%
3	How captioning benefits individuals for whose first language is not English	<div></div>	27	36.99%
4	How captioning can benefit all individuals	<div></div>	54	73.97%
5	Other (please explain)	<div></div>	13	17.81%
	Total		142	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	5	3.08	1.51	1.23	142	73

Other (please explain)
copyright issues
NA
How to caption
How to do captioning, where to put the text, etc., so that it does not block important visual aspects of the message.
That is really frustrating when the captioning actually blocks "key points" that are shown on the bottom of the screen by a speaker, or if the screen is a ppt slide if the captioning covers the bottom of the slide; so I'd like to know how to design and record videos to work well with captioning from the start of the project.
How do I do captioning?
Who will do the captioning on campus
none
more about how to DO captioning
how to do this with no budget
visually impaired
negative consequences, such as video records and copyright
How to build captioning into a video

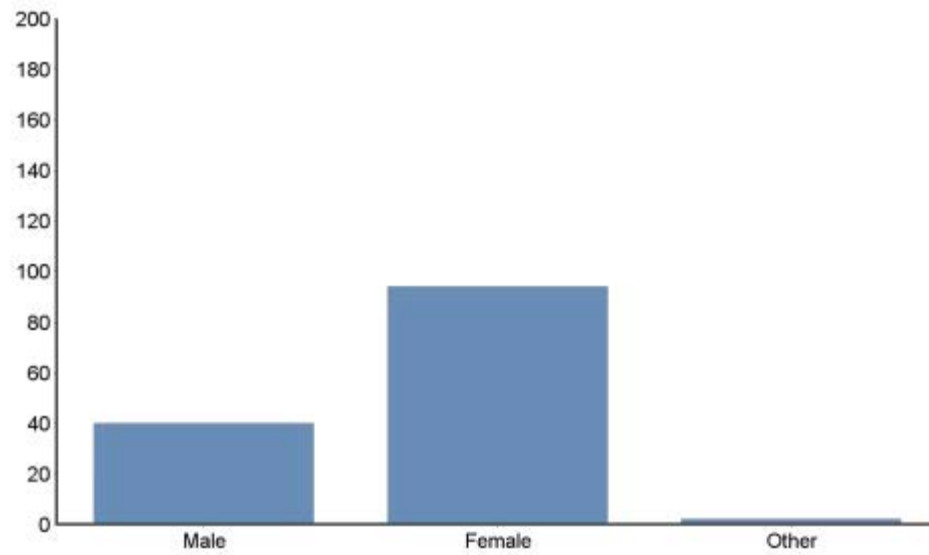
How important do you rate the issue of captioning at UMD?



#	Answer	Bar	Response	%
1	Not at all Important	<div></div>	1	0.69%
2	Very Unimportant	<div></div>	11	7.59%
3	Somewhat Unimportant	<div></div>	13	8.97%
4	Neither Important nor Unimportant	<div></div>	12	8.28%
5	Somewhat Important	<div></div>	46	31.72%
6	Very Important	<div></div>	38	26.21%
7	Extremely Important	<div></div>	24	16.55%
Total			145	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	7	5.08	2.17	1.47	145	145

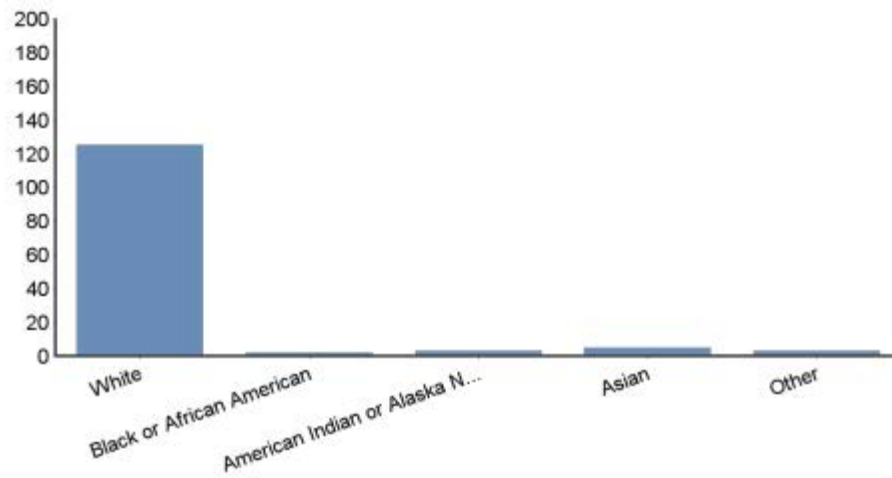
Gender:



#	Answer	Bar	Response	%
1	Male	<div></div>	40	29.41%
2	Female	<div></div>	94	69.12%
3	Other	<div></div>	2	1.47%
Total			136	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	3	1.72	0.23	0.48	136	136

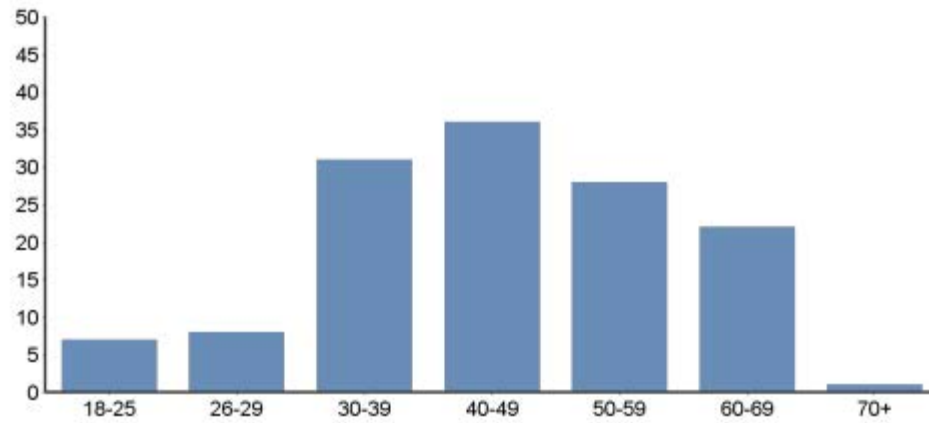
Ethnicity (check all that apply):



#	Answer	Bar	Response	%
1	White	<div></div>	125	93.28%
2	Black or African American	<div></div>	2	1.49%
3	American Indian or Alaska Native	<div></div>	3	2.24%
4	Asian	<div></div>	5	3.73%
5	Other	<div></div>	3	2.24%
	Total		138	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	5	1.25	0.72	0.85	138	134

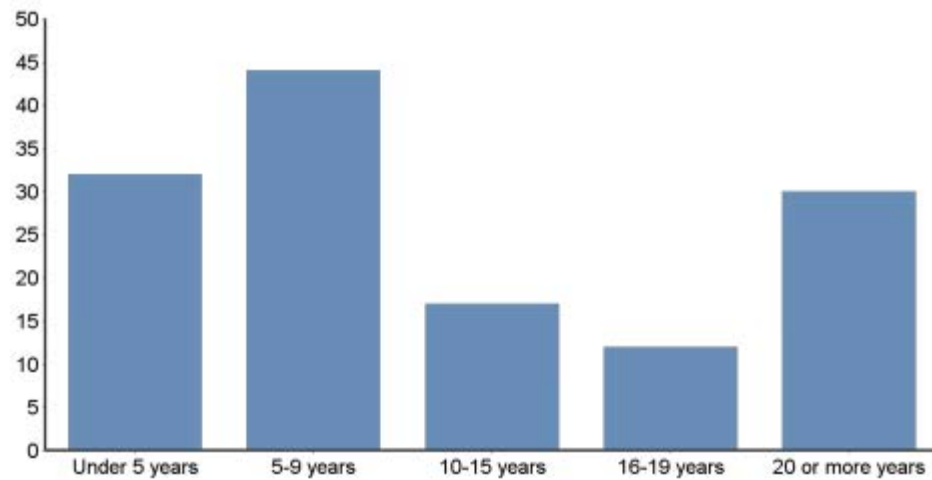
Age:



#	Answer	Bar	Response	%
1	18-25	<div></div>	7	5.26%
2	26-29	<div></div>	8	6.02%
3	30-39	<div></div>	31	23.31%
4	40-49	<div></div>	36	27.07%
5	50-59	<div></div>	28	21.05%
6	60-69	<div></div>	22	16.54%
7	70+	<div></div>	1	0.75%
Total			133	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	7	4.05	1.90	1.38	133	133

How long have you been affiliated with UMD?



#	Answer	Bar	Response	%
1	Under 5 years	<div></div>	32	23.70%
2	5-9 years	<div></div>	44	32.59%
3	10-15 years	<div></div>	17	12.59%
4	16-19 years	<div></div>	12	8.89%
5	20 or more years	<div></div>	30	22.22%
Total			135	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	5	2.73	2.20	1.48	135	135